Crossrail

Crossing the Capital, Connecting the UK

LIMMO PENINSULA

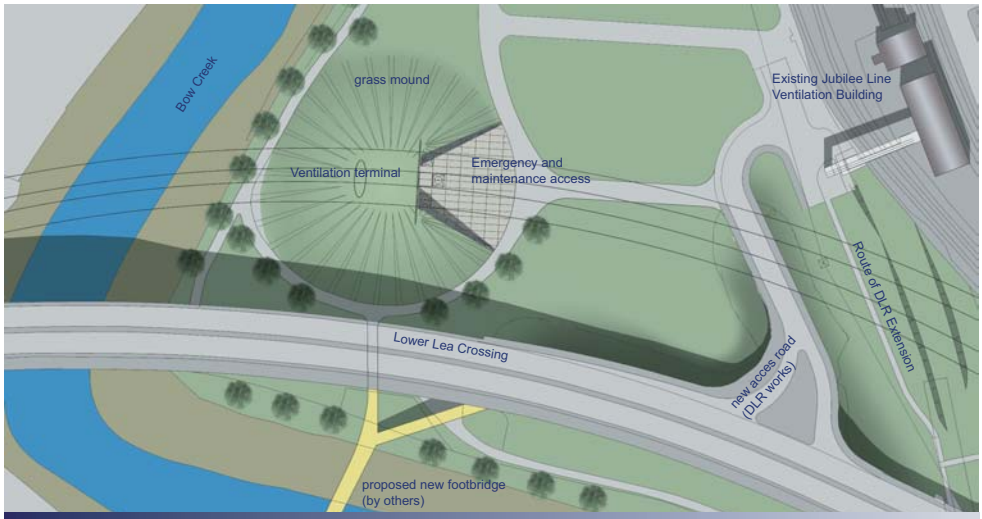
PROPOSED SHAFT DESIGN

The ventilation shaft structures would be:

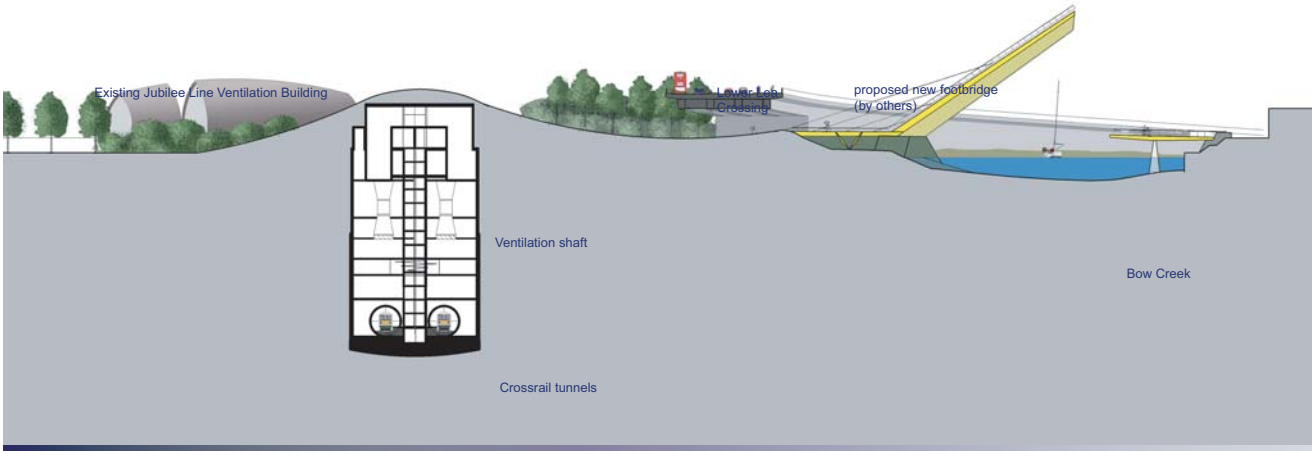
A large diameter shaft from surface to track level to house ventilation fans, emergency escape and intervention stairs and equipment rooms;

A ventilation outlet and some equipment rooms beneath a grass mound;

An open area at surface level for passengers in the event of a train evacuation, and space for emergency and maintenance vehicles.



Detailed Site Plan



Section - North / South

View across Limmo Peninsula looking South

The ventilation terminal located on top of the grass mound would be an eye-catching sculptural object addressing the river and the Lower Lea Crossing. Passenger escape, emergency intervention and maintenance would be from a cut in the mound to the east. Surface covers on the floor of this cut, would provide access to fans.

Existing View

10601-c1v17-50012

Crossrail

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ABBEY WOOD

PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Abbey Wood station by providing journey time savings and a much greater variety of convenient travel destinations.

Abbey Wood Station Entrance

During peak hours it is proposed that Crossrail will enable up to 12 additional train services per hour to/from Abbey Wood station.

Abbey Wood Station Footbridge

The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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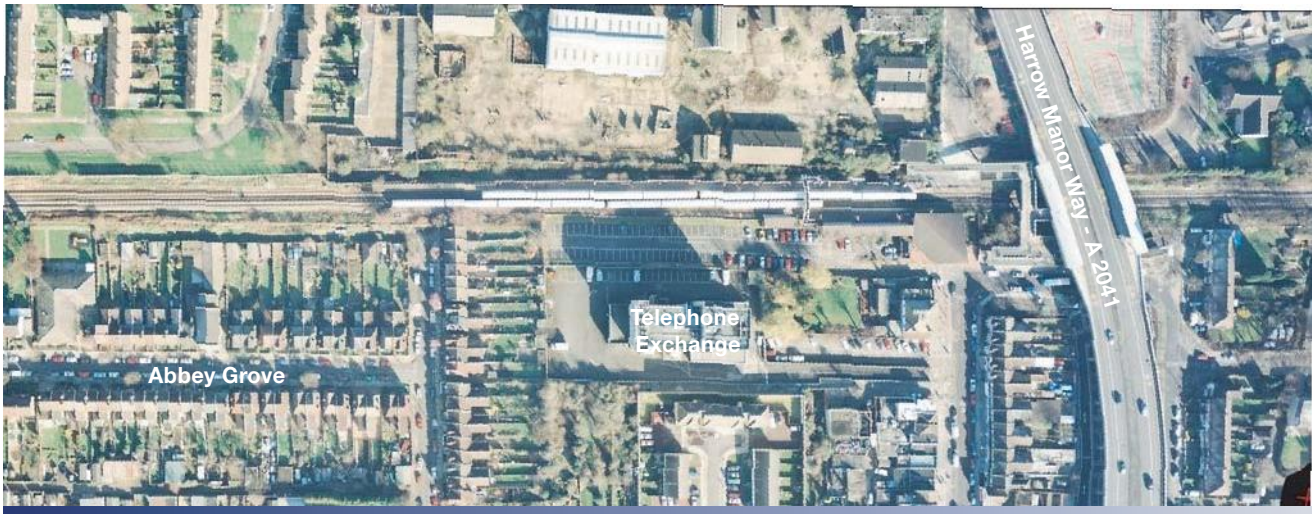
Crossrail

Crossing the Capital, Connecting the UK

ABBEY WOOD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.



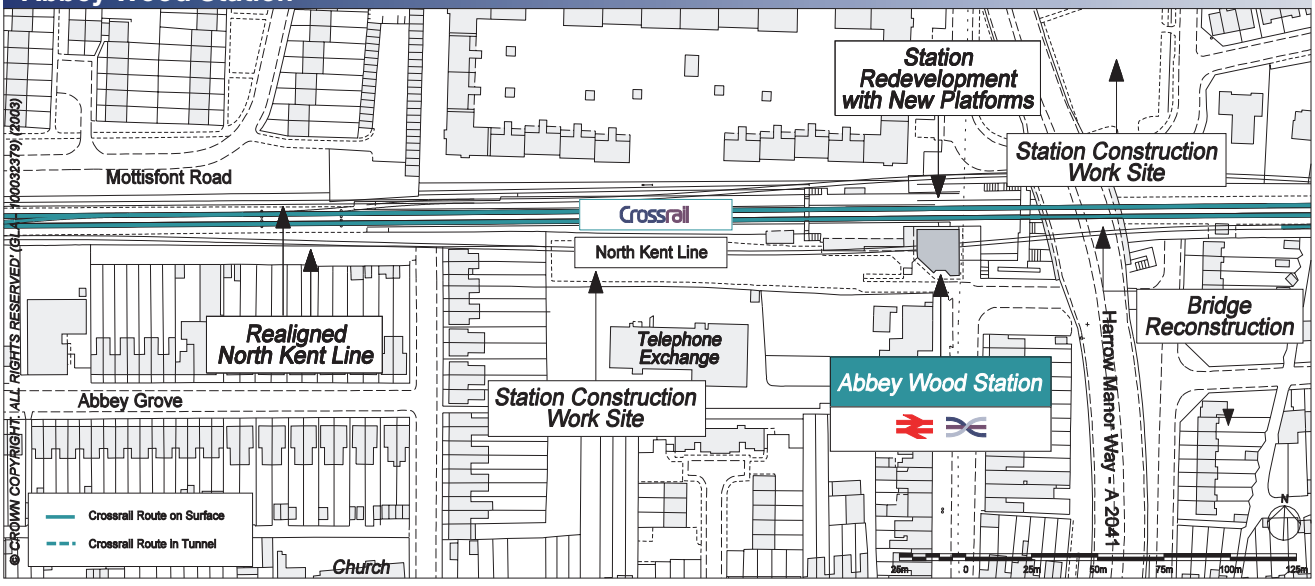
Abbey Wood Station

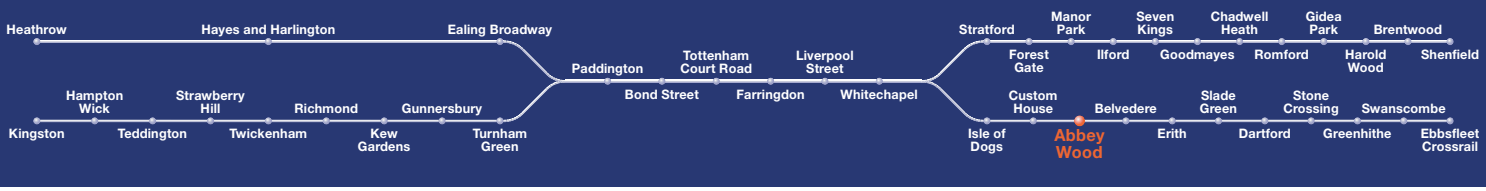
The design of Abbey Wood station is presently under consideration. It is proposed to significantly redevelop the station with four platforms and the provision of a new high quality interchange between Crossrail, North Kent line, Greenwich Waterfront Transit and local bus services. In addition, it is proposed that some Silverlink Metro services that currently use the North London Line to North Woolwich could travel as far as Abbey Wood via the Crossrail Thames Crossing.

It is proposed that some Crossrail trains will turn back at Abbey Wood, while some will carry on to Ebbsfleet.

Station improvements at Abbey Wood will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Greenwich, London Borough of Bexley and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Abbey Wood Station





Crossrail

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BELVEDERE

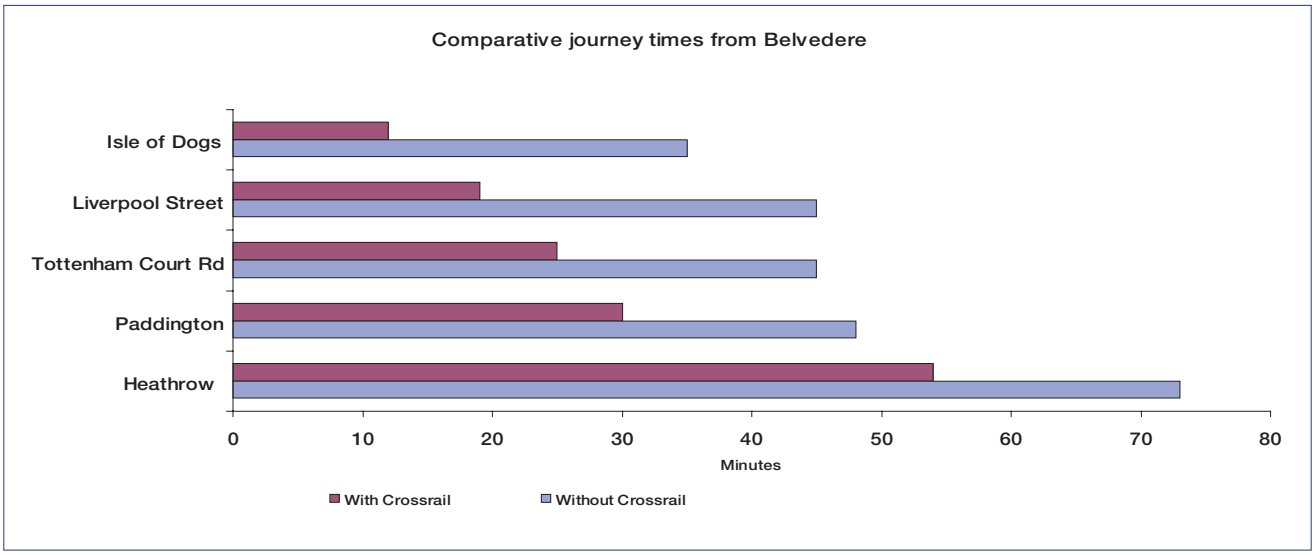
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Belvedere station by providing journey time savings and a much greater variety of convenient travel destinations.

Belvedere Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Belvedere station.

Belvedere Station Footbridge



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

BELVEDERE

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

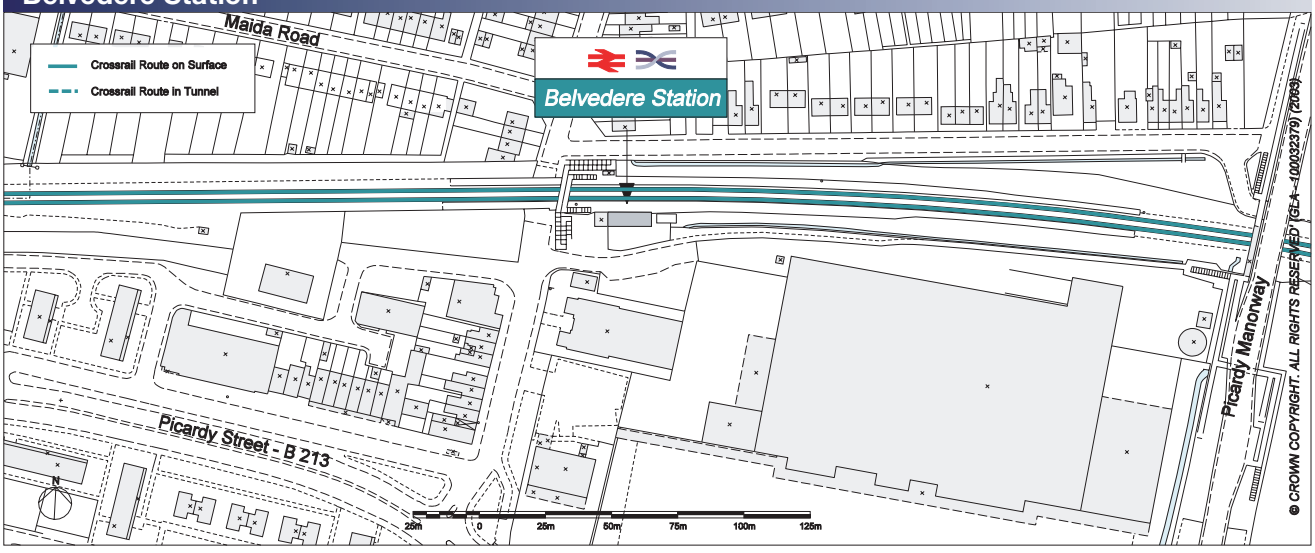
Belvedere Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired person access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Bexley and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Belvedere Station



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Crossrail

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BRENTWOOD

PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Brentwood station by providing journey time savings and a much greater variety of convenient travel destinations.

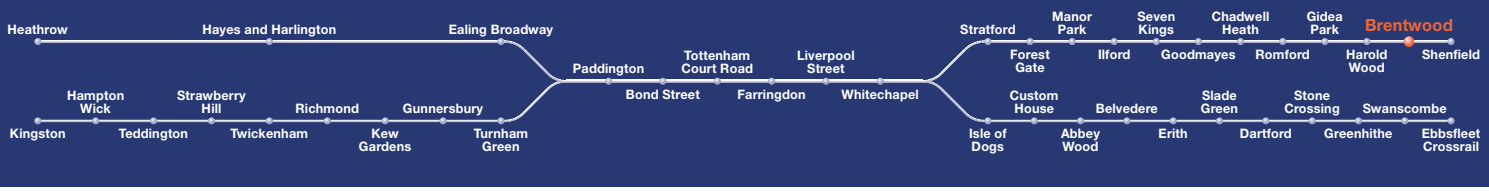
Brentwood Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Brentwood station.

Brentwood Station Platform and Canopy

The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.



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Crossrail

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BRENTWOOD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

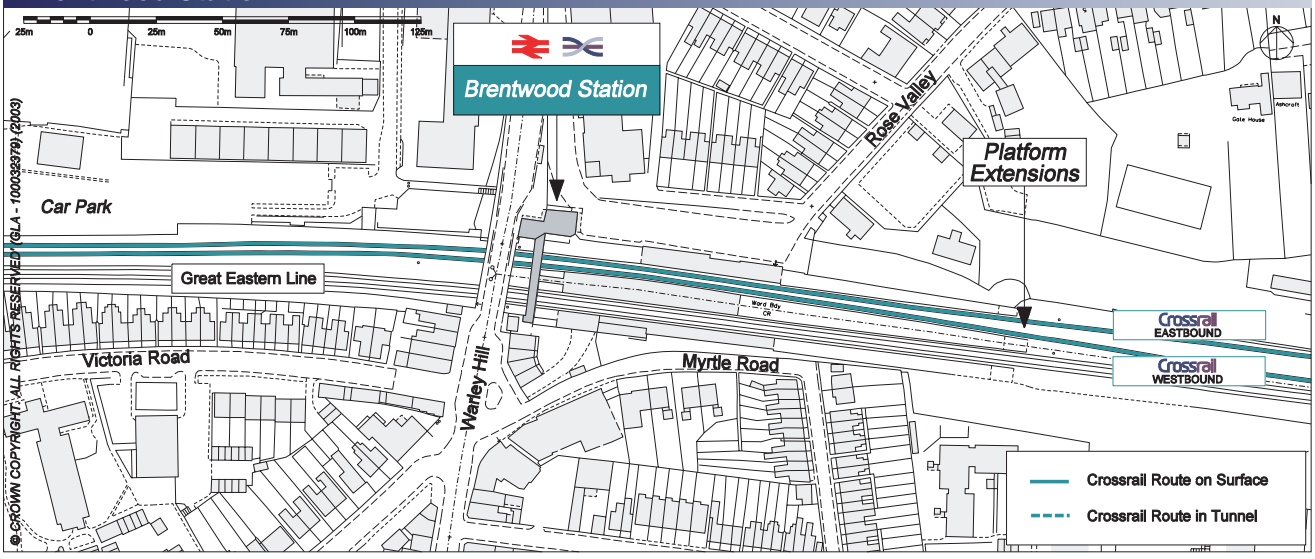
Brentwood Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Brentwood Borough Council, Essex County Council and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Brentwood Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

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CHADWELL HEATH

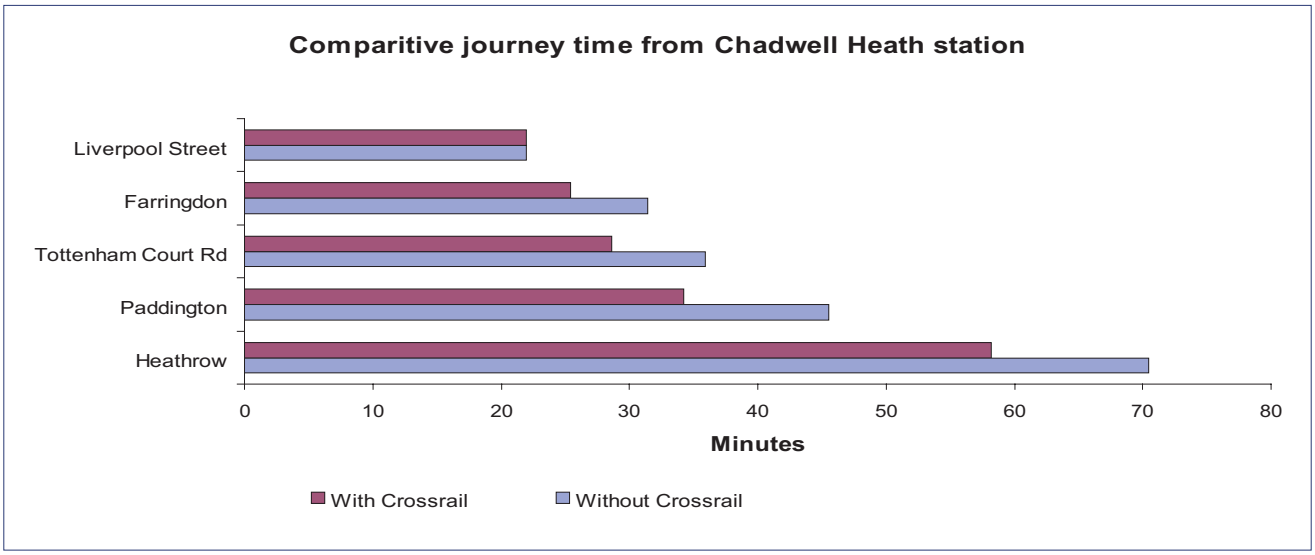
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Chadwell Heath station by providing journey time savings and a much greater variety of convenient travel destinations.

Chadwell Heath Station Entrance

During peak hours it is proposed that Crossrail will enable up to seven additional train services per hour to/from Chadwell Heath station.

Chadwell Heath Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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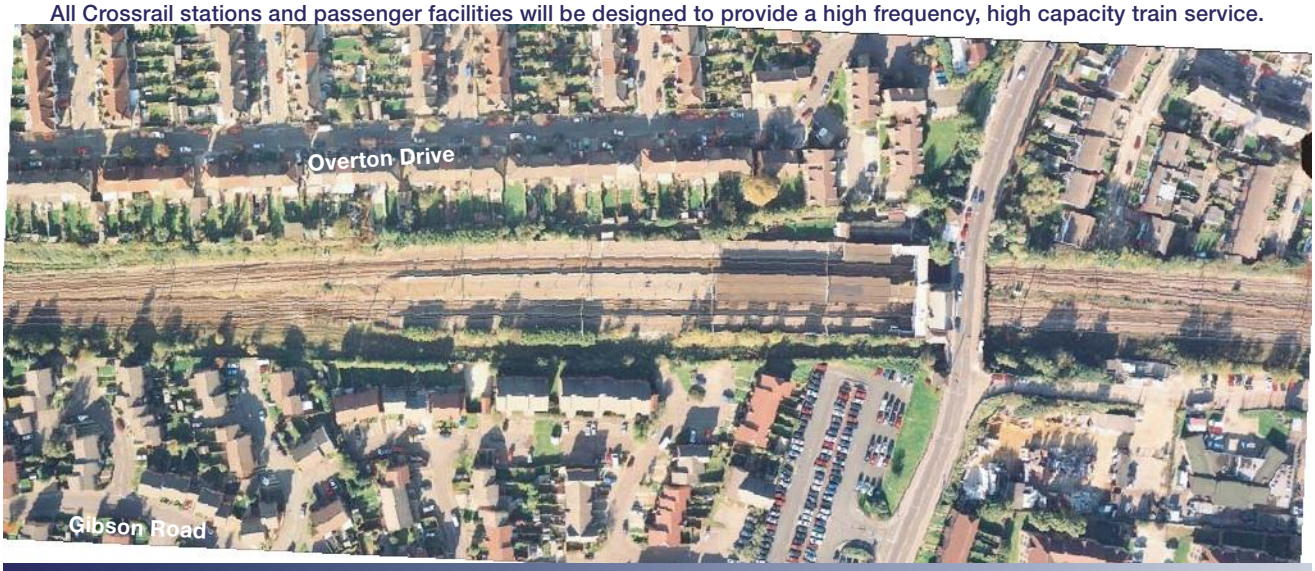
CHADWELL HEATH

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities will be designed to provide a high frequency, high capacity train service.



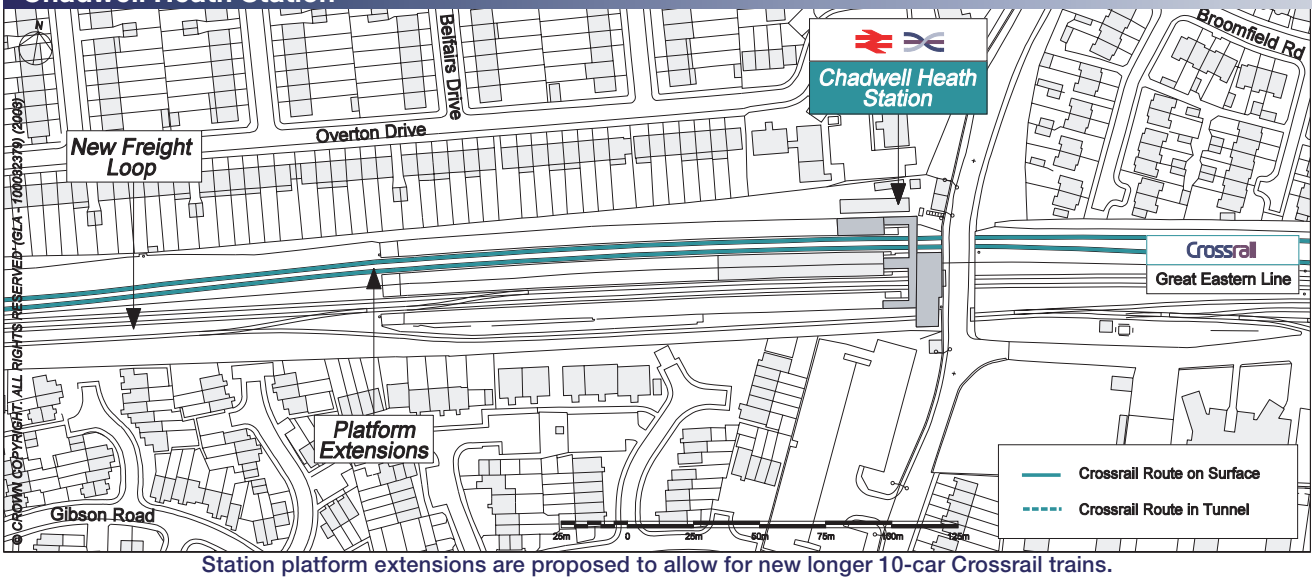
Chadwell Heath Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Redbridge and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Chadwell Heath Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

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CUSTOM HOUSE

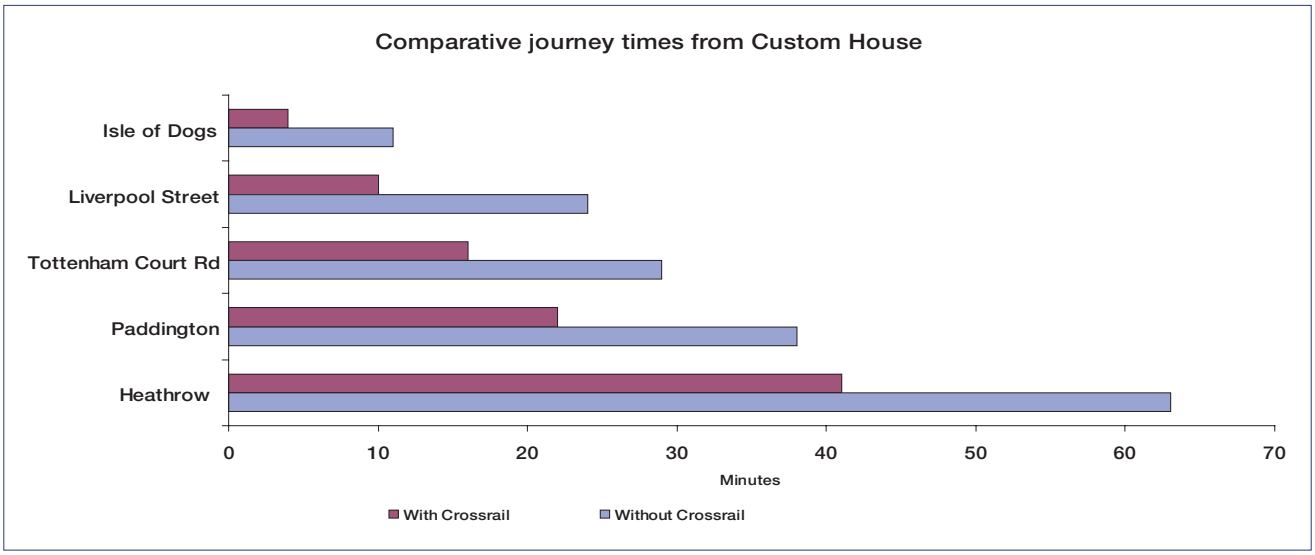
PROPOSED SERVICE IMPROVEMENTS

Crossrail will improve train services to/from Custom House station by providing journey time savings and a much greater variety of convenient travel destinations.

Custom House DLR Station Platforms

During peak hours it is proposed that Crossrail will enable up to 12 additional train services per hour to/from Custom House station.

Custom House Station Platforms



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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CUSTOM HOUSE - SILVERTOWN

PROPOSED TRACK IMPROVEMENTS

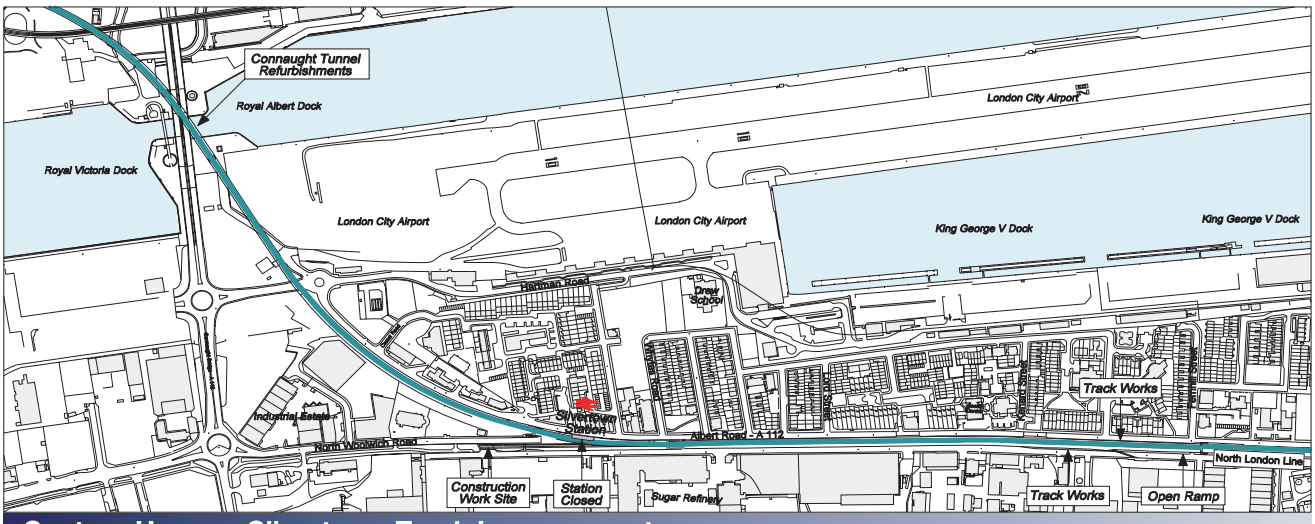
Following improvements to existing track, it is proposed that Crossrail will travel east of Custom House Station along the North London Line to a new tunnel under the River Thames between North Woolwich and Plumstead.

Custom House - Silvertown Track Improvements

Crossrail services will pass through the existing Connaught Tunnel. The tunnel will be significantly refurbished.

Crossrail proposes to dismantle Silvertown station. Passengers that currently use the station will be able to use new and more regular services from a new DLR station at West Silvertown (Silvertown Way) or Pontoon Dock (North Woolwich Road).

Connaught Tunnel



Custom House - Silvertown Track Improvements

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Crossrail

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CUSTOM HOUSE

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities will be designed to provide a high frequency, high capacity train service.

Custom House Station

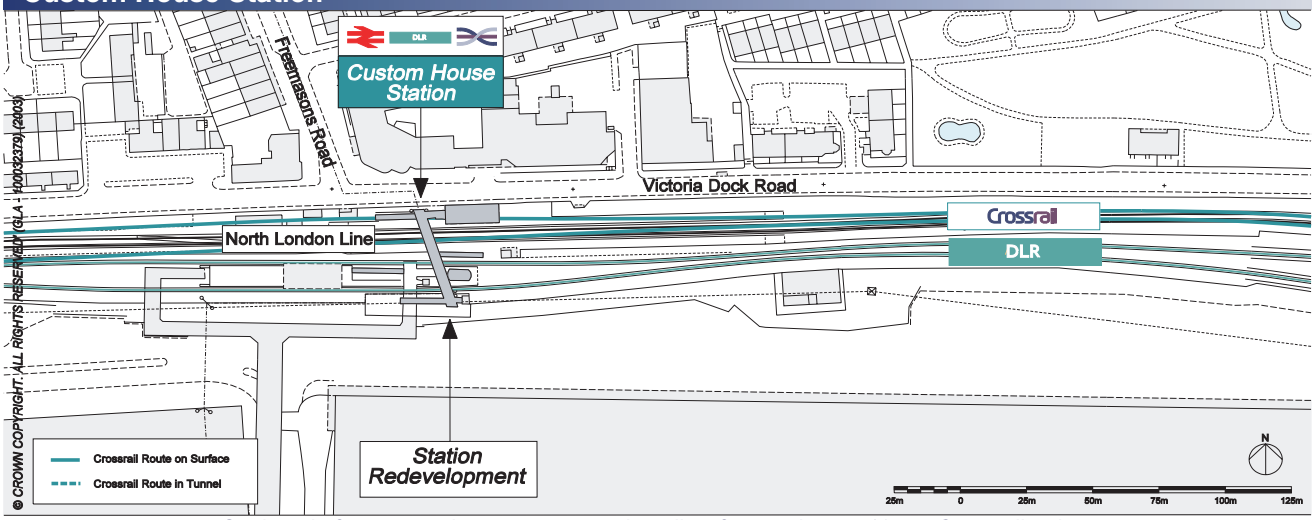
The design of Custom House station is presently under consideration. It is proposed to significantly redevelop the station and to improve the interchange between Crossrail, Silverlink Metro, Docklands Light Railway (DLR) and local bus services.

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

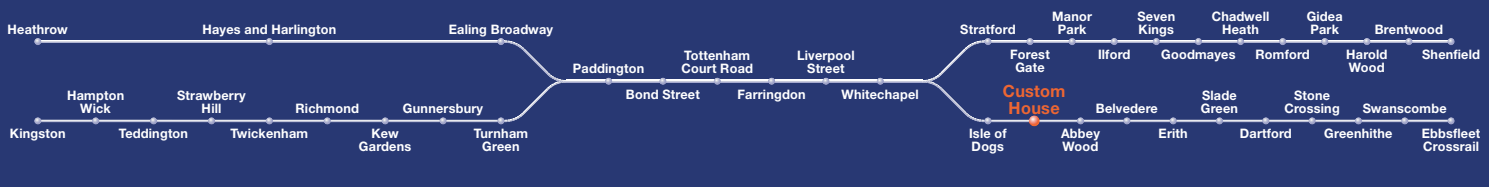
- Station design improvements
- Mobility impaired person access
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Ticket gates
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Newham and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Custom House Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.



Crossrail

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DARTFORD

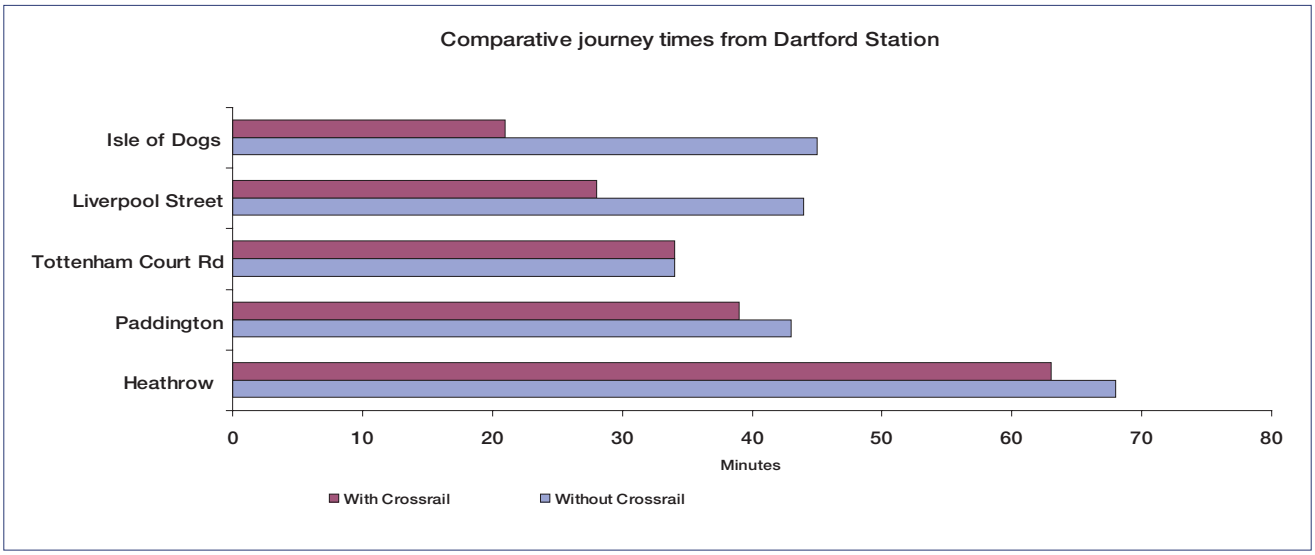
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Dartford station by providing journey time savings and a much greater variety of convenient travel destinations.

Dartford Station Entrance

During peak hours it is proposed that Crossrail will enable up to two additional train services per hour to/from Dartford station.

Dartford Station Platform and Trains



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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DARTFORD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

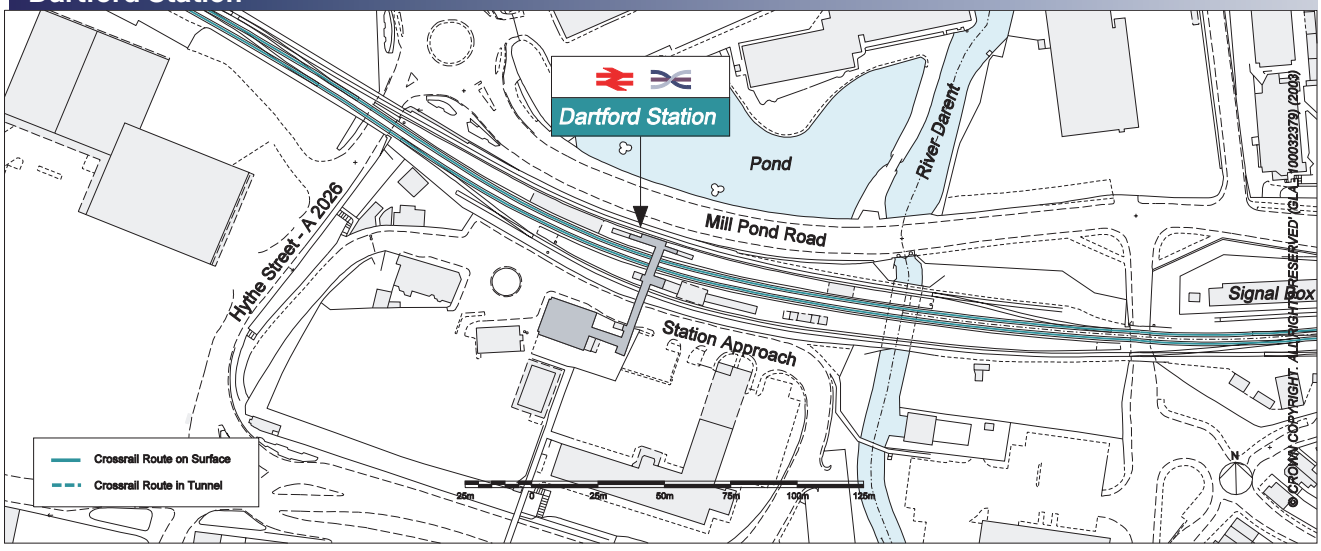
Dartford Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Mobility impaired person access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Dartford Borough Council, Kent County Council and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Dartford Station



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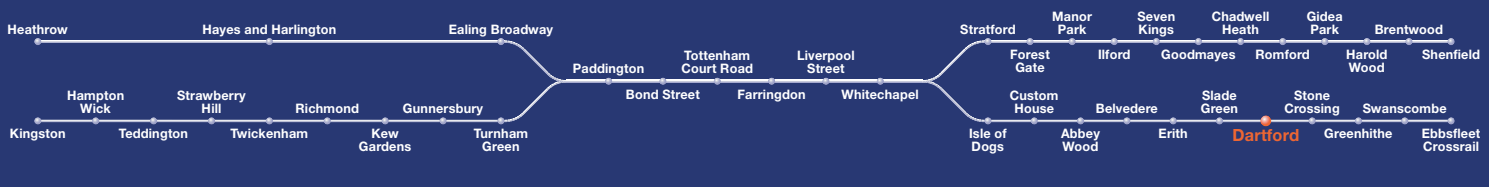

Crossrail

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EBBSFLEET CROSSRAIL

PROPOSED NEW STATION

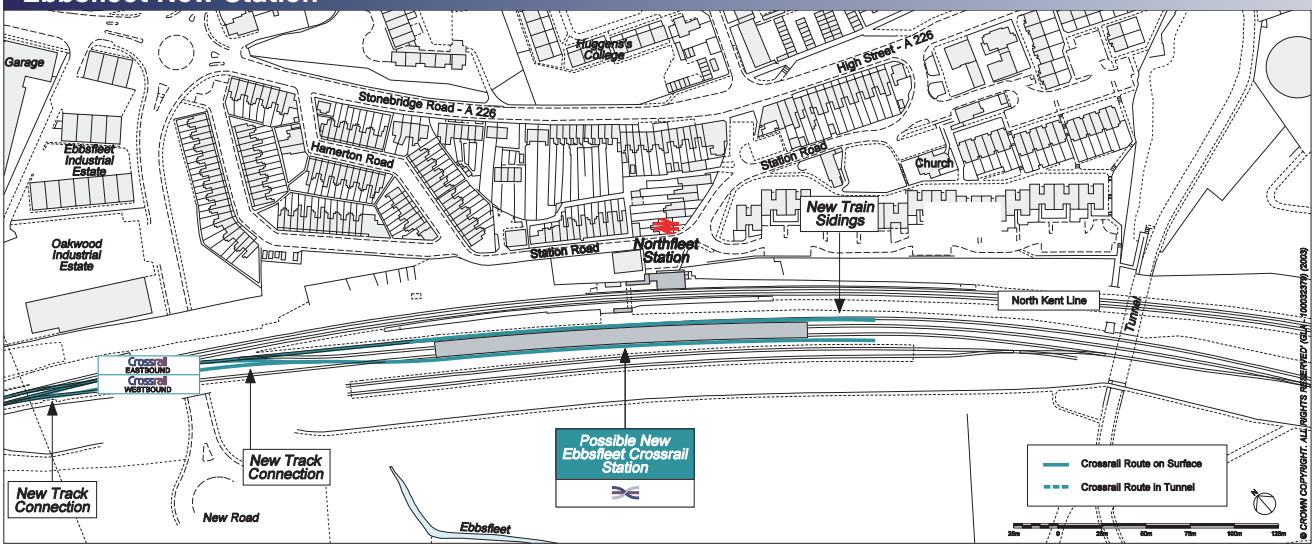
Crossrail is considering the development of a new station at Ebbsfleet to create an interchange with the new Channel Tunnel Rail Link services and to serve local development.

Ebbsfleet New Station

The Government has identified the Ebbsfleet Valley as one of the key areas for housing and job creation in the south-east of England. The provision of efficient transport links is seen as essential to help support local development. A possible Crossrail station at Ebbsfleet would be connected to the North Kent line with the construction of a short section of new track. An interchange with Northfleet station and the proposed Fastrack public transport system is also under consideration.

Crossrail is also considering whether Gravesend (via Northfleet) rather than Ebbsfleet, would be a more suitable destination on the North Kent line.

Ebbsfleet New Station



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Crossrail

Crossing the Capital, Connecting the UK

ERITH

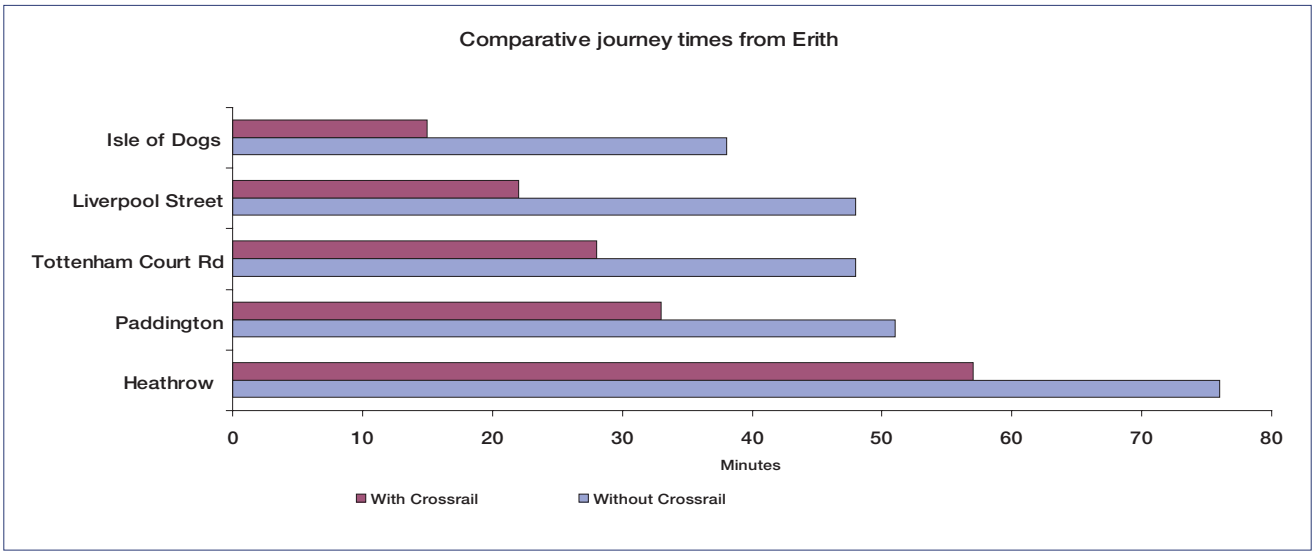
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Erith station by providing journey time savings and a much greater variety of convenient travel destinations.

Erith Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Erith station.

Erith Station Platform and Canopy



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Crossrail

Crossing the Capital, Connecting the UK

ERITH

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

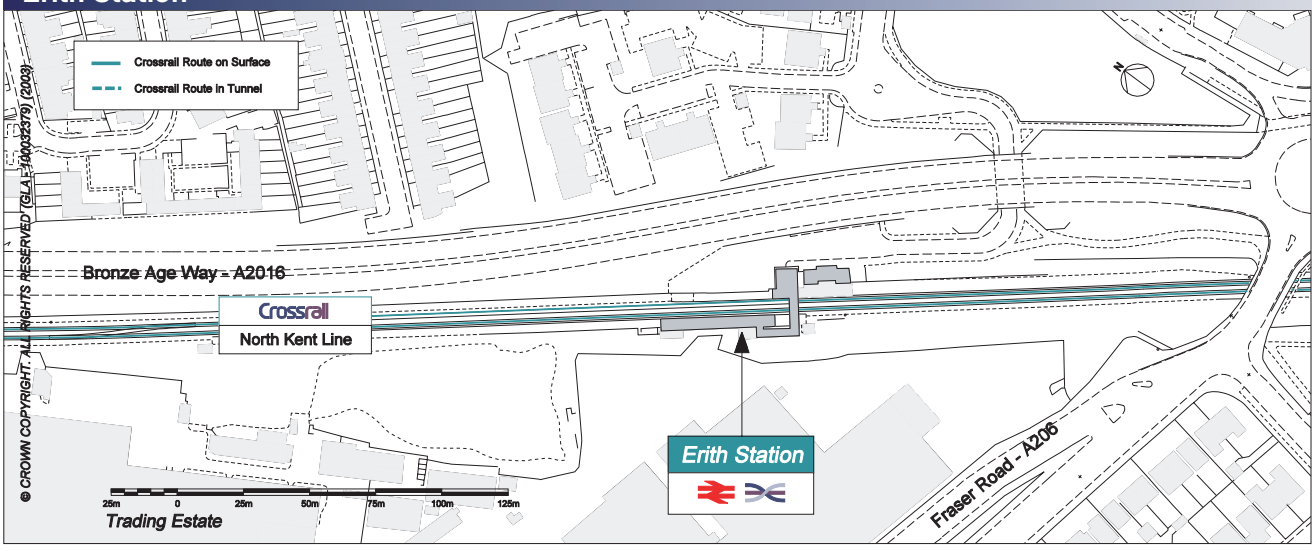
Erith Station

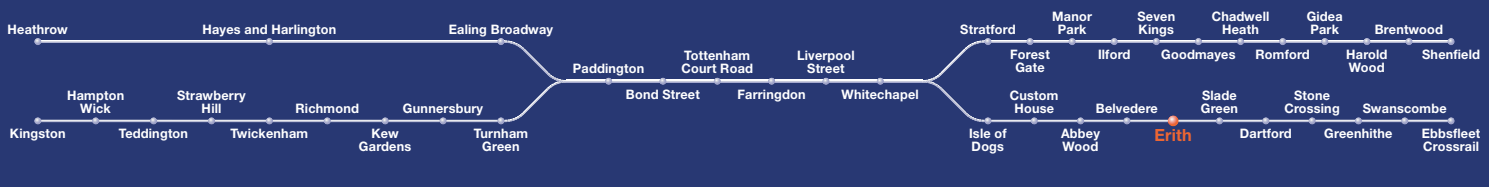
Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Mobility impaired person access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Bexley and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Erith Station





Crossrail

Crossing the Capital, Connecting the UK

FOREST GATE

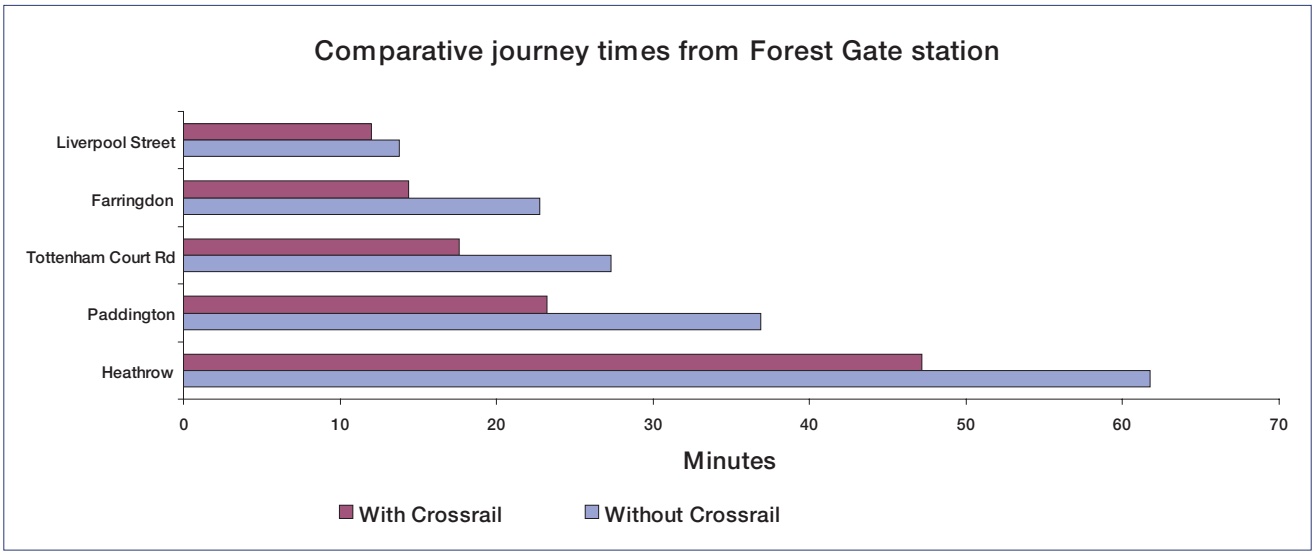
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Forest Gate station by providing journey time savings and a much greater variety of convenient travel destinations.

Forest Gate Station Entrance

During peak hours it is proposed that Crossrail will enable up to 12 additional train services per hour to/from Forest Gate station.

Forest Gate Station Platform and Station



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

FOREST GATE

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

Forest Gate Station

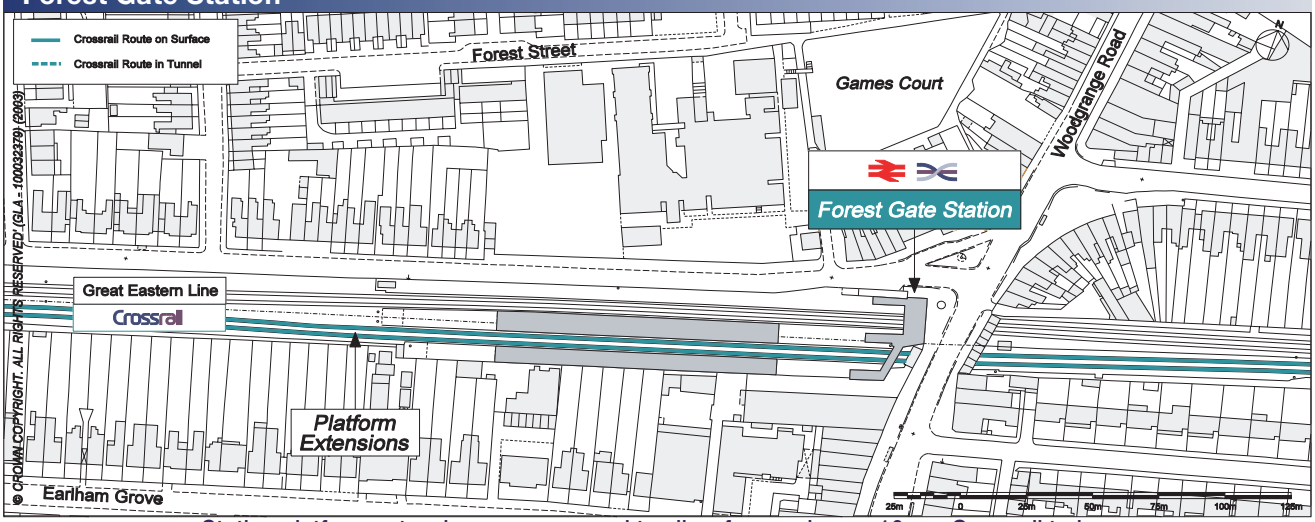
Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Newham and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

It is proposed that Crossrail services will not stop at Maryland station. It will continue to be served by train services to/from Liverpool St station.

Forest Gate Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

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Crossrail

Crossing the Capital, Connecting the UK

GIDEA PARK

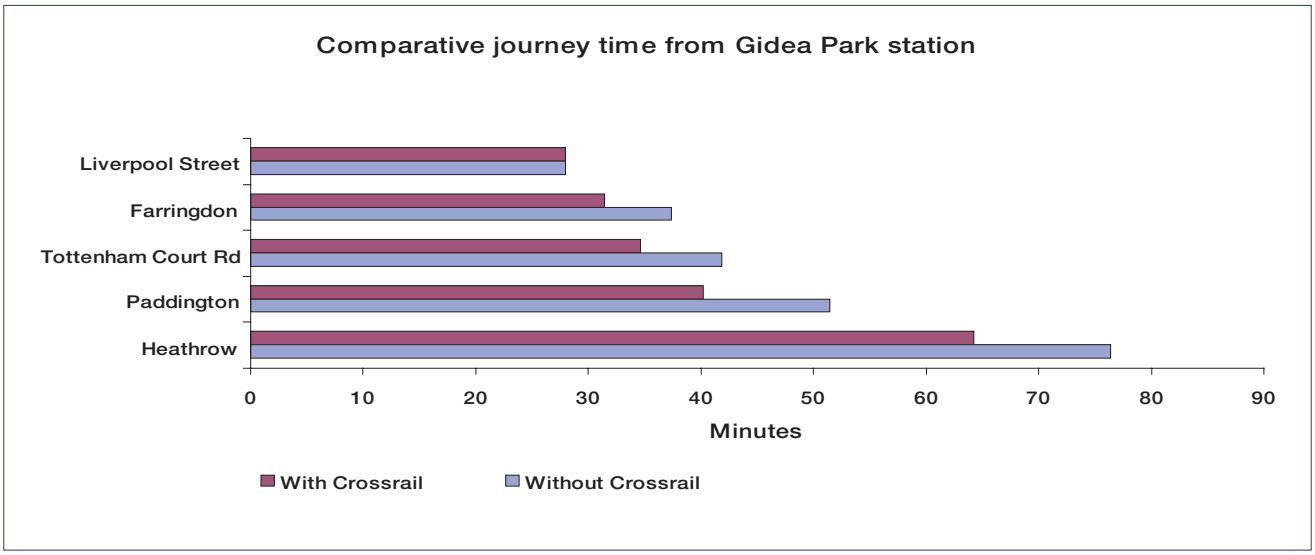
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Gidea Park station by providing journey time savings and a much greater variety of convenient travel destinations.

Gidea Park Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Gidea Park station.

Gidea Park Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

GIDEA PARK

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

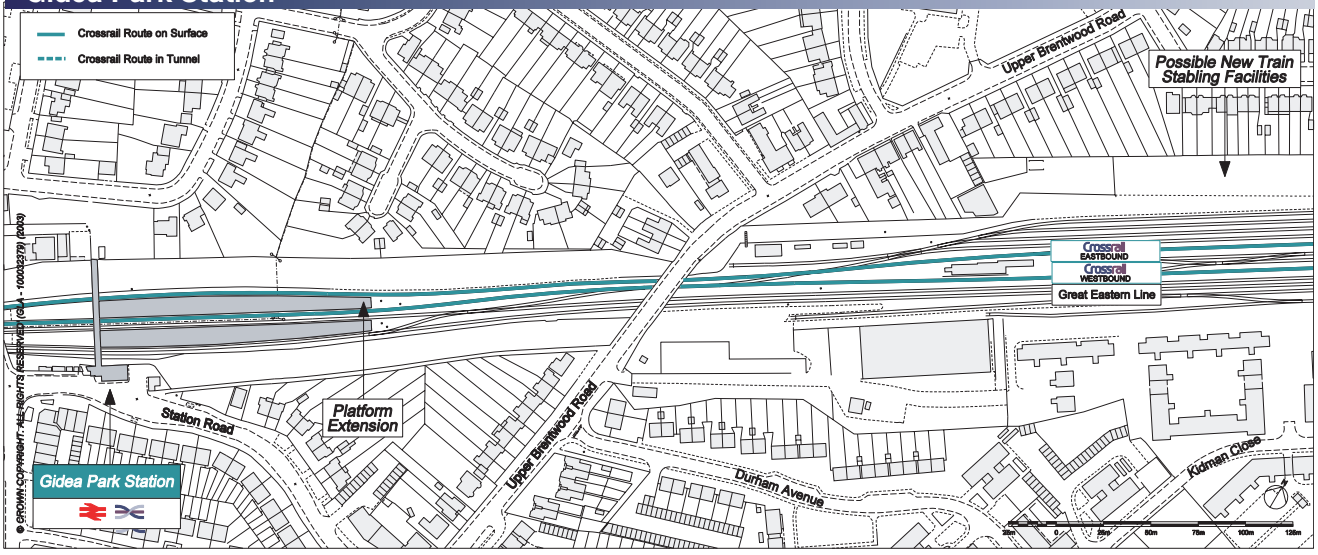
Gidea Park Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired person access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Parking management improvements
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Havering and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Gidea Park Station



Extensions to the station platforms and train sidings are proposed to allow for new longer 10-car Crossrail trains.

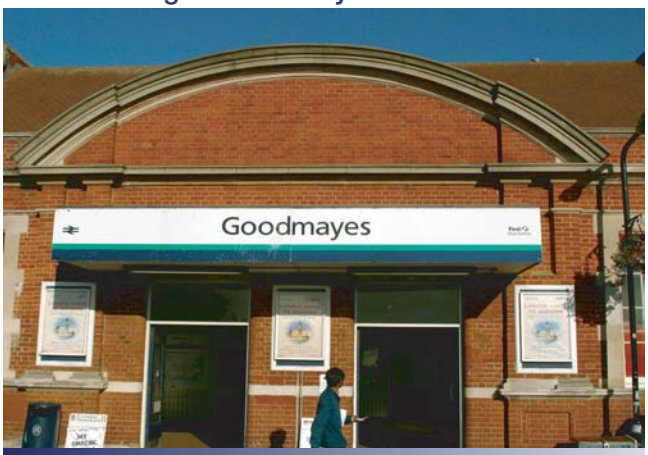
Crossrail

Crossing the Capital, Connecting the UK

GOODMAYES

PROPOSED SERVICE IMPROVEMENTS

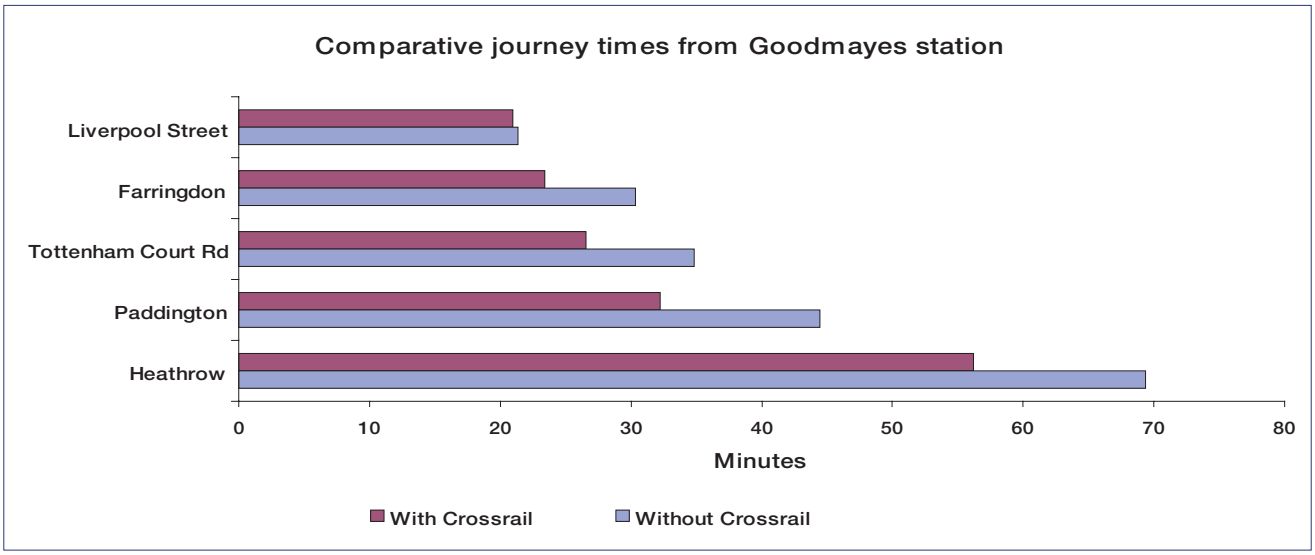
Crossrail wouldr improve train services to/from Goodmayes station by providing journey time savings and a much greater variety of convenient travel destinations.



Goodmayes Station Entrance

During peak hours it is proposed that Crossrail will enable up to nine additional train services per hour to/from Goodmayes station.

Goodmayes Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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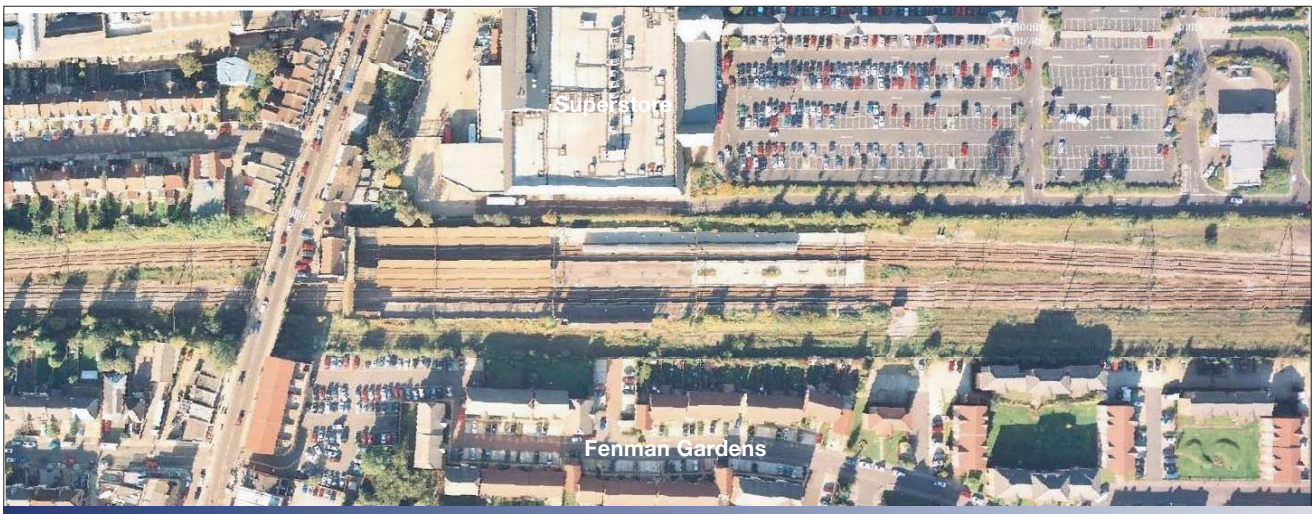
Crossrail

Crossing the Capital, Connecting the UK

GOODMAYES

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.



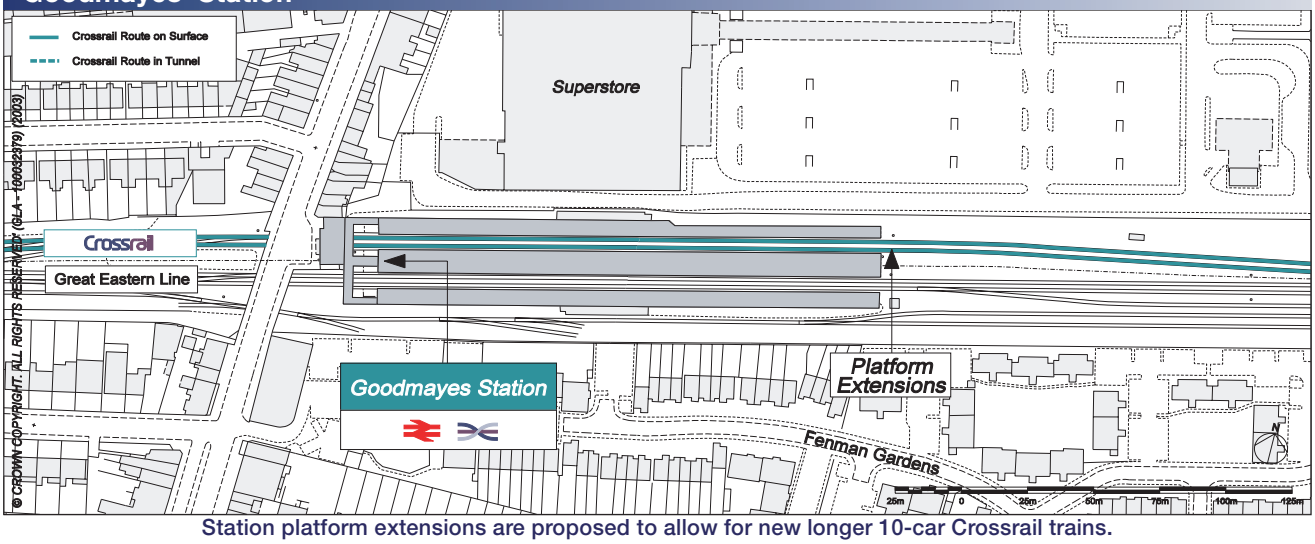
Goodmayes Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Redbridge and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Goodmayes Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

Crossing the Capital, Connecting the UK

GREAT EASTERN LINE

PROPOSED SERVICE IMPROVEMENTS

Great Eastern Line Service Improvements

Crossrail proposes to improve rail services on the Great Eastern Line with:

- New and more frequent trains
- Faster journeys to the City, West End and West London with no need to change trains
- Improved links to Heathrow Airport, Docklands and North Kent
- Additional capacity and crowding relief

Crossrail would generally operate as an “all stations” service with up to 12 trains an hour during peak periods, and up to eight at other times. Crossrail will replace most of the existing “Metro” services, although some could continue to operate between Gidea Park and Liverpool Street Station. Services from further afield such as Ipswich, Chelmsford and Southend would continue to operate much as they do today. The detailed service pattern will be determined in conjunction with the Strategic Rail Authority and the train operator appointed to run the new services.

Great Eastern Line Service Improvements

Other major benefits of Crossrail include crowding relief on the Central and District lines, and the release of platform capacity at Liverpool Street Station that could facilitate additional train services from places such as Stansted Airport.

Crossrail is considering suitable train stabling locations on the Great Eastern Line including options near Ilford, Romford, Gidea Park, Harold Wood, Brentwood and Shenfield. This ongoing study takes account of a range of engineering, operational and planning issues in consultation with the Strategic Rail Authority and local authorities. This will be examined further during future consultation.

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Crossrail

Crossing the Capital, Connecting the UK

GREENHITHE

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

Greenhithe Station

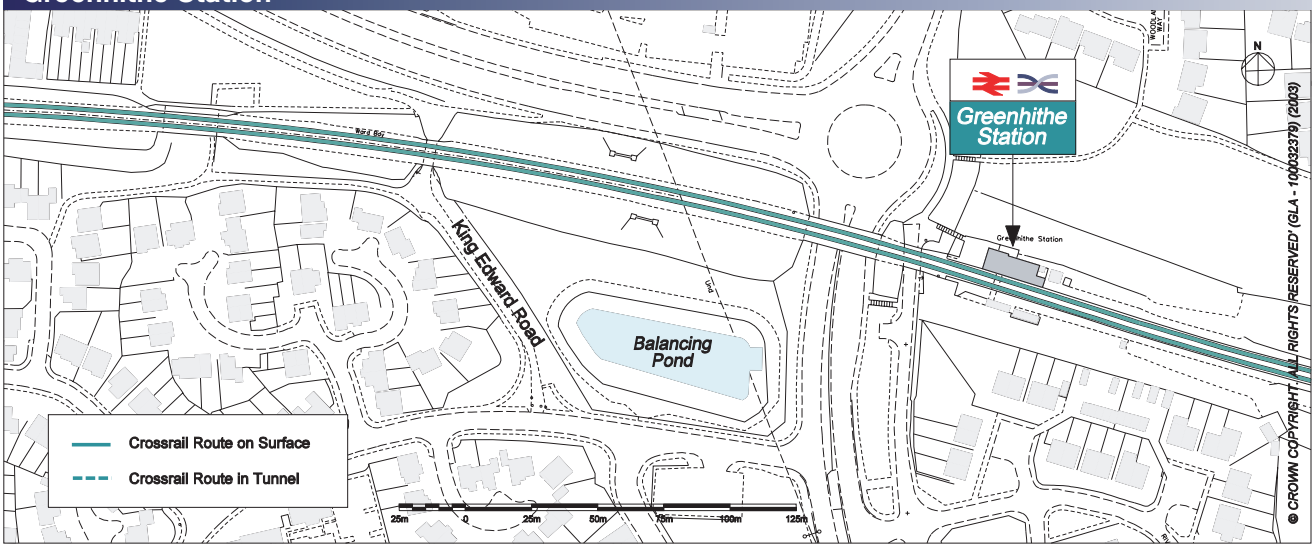
Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

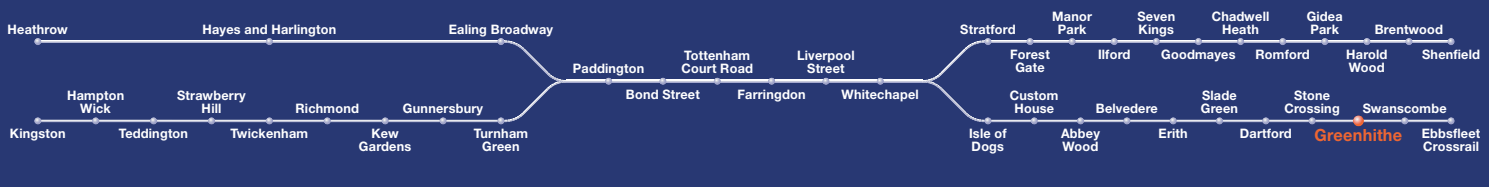
- Station design improvements
- Mobility impaired person access improvements
- Safety and security improvements
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Dartford Borough Council, Kent County Council and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Kent County Council and the Strategic Rail Authority are currently considering a major redevelopment of Greenhithe station that could link the station with the proposed Fastrack public transport system.

Greenhithe Station





Crossrail

Crossing the Capital, Connecting the UK

HAROLD WOOD

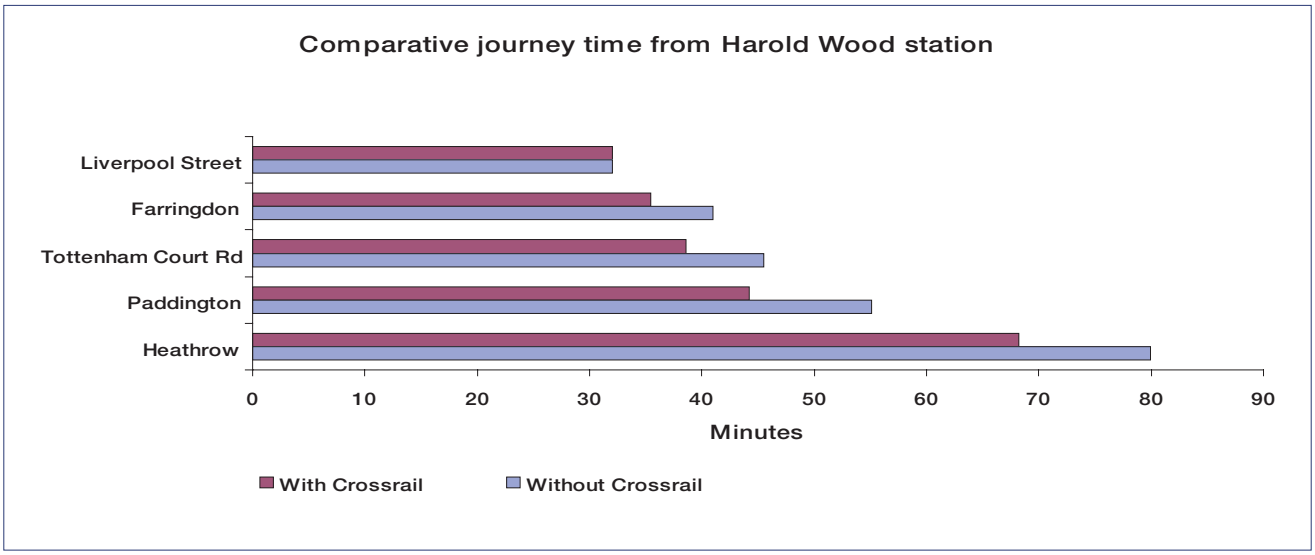
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Harold Wood station by providing journey time savings and a much greater variety of convenient travel destinations.

Harold Wood Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Harold Wood station.

Harold Wood Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

100011-tis22-50001

Crossrail

Crossing the Capital, Connecting the UK

HAROLD WOOD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

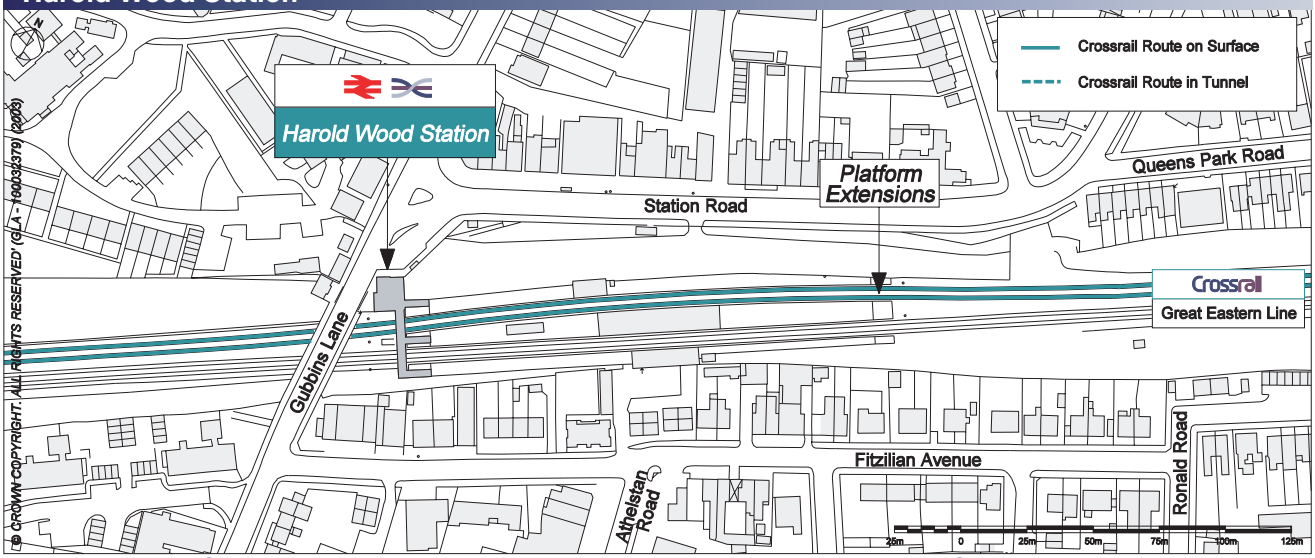
Harold Wood Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Havering and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Harold Wood Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

Crossing the Capital, Connecting the UK

ILFORD

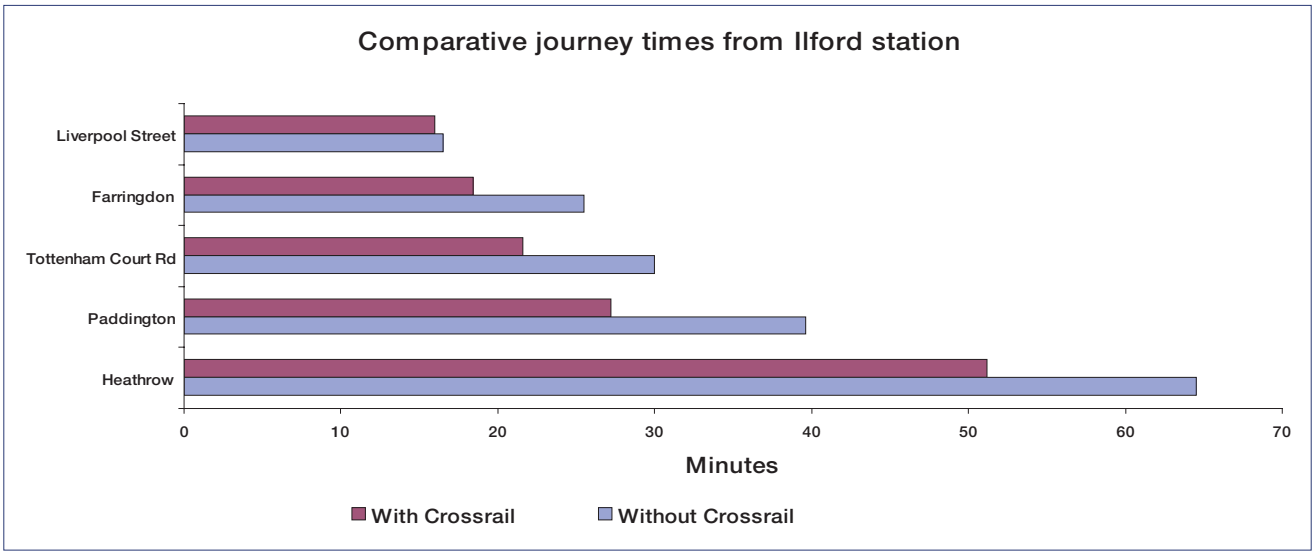
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Ilford station by providing journey time savings and a much greater variety of convenient travel destinations.

Ilford Station Entrance

During peak hours it is proposed that Crossrail will enable up to two additional train services per hour to/from Ilford station (excluding long distance services).

Ilford Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

ILFORD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities will be designed to provide a high frequency, high capacity train service.

Ilford Station

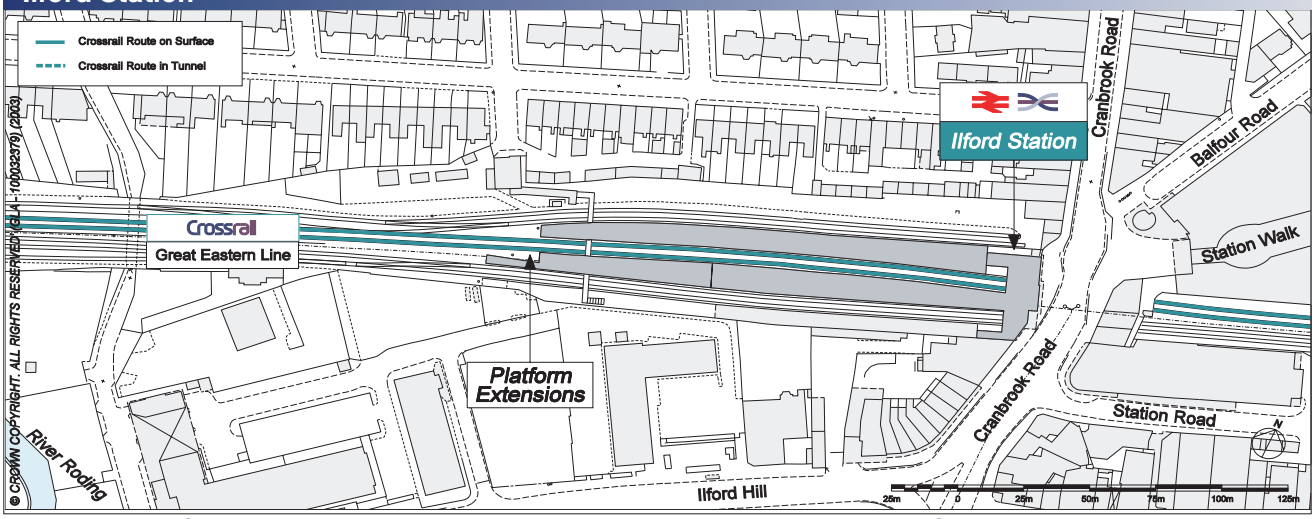
Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Station design improvements
- Mobility impaired person access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

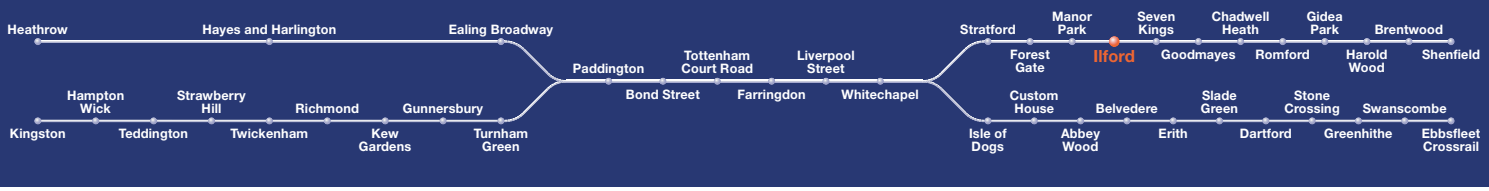
The London Borough of Redbridge is promoting the development of a new public transport interchange at Ilford that could also accommodate East London Transit services.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Redbridge and the local community. The specific transport issues identified will be assessed as part of the environmental impact assessment.

Ilford Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.



Crossrail

Crossing the Capital, Connecting the UK

LIMMO PENINSULA

PROPOSED SHAFT DEVELOPMENT

Crossrail propose to locate a tunnel shaft on Limmo Peninsula. The vacant land on the Peninsula will be used as a worksite during the project's construction.

Limmo Peninsula Shaft

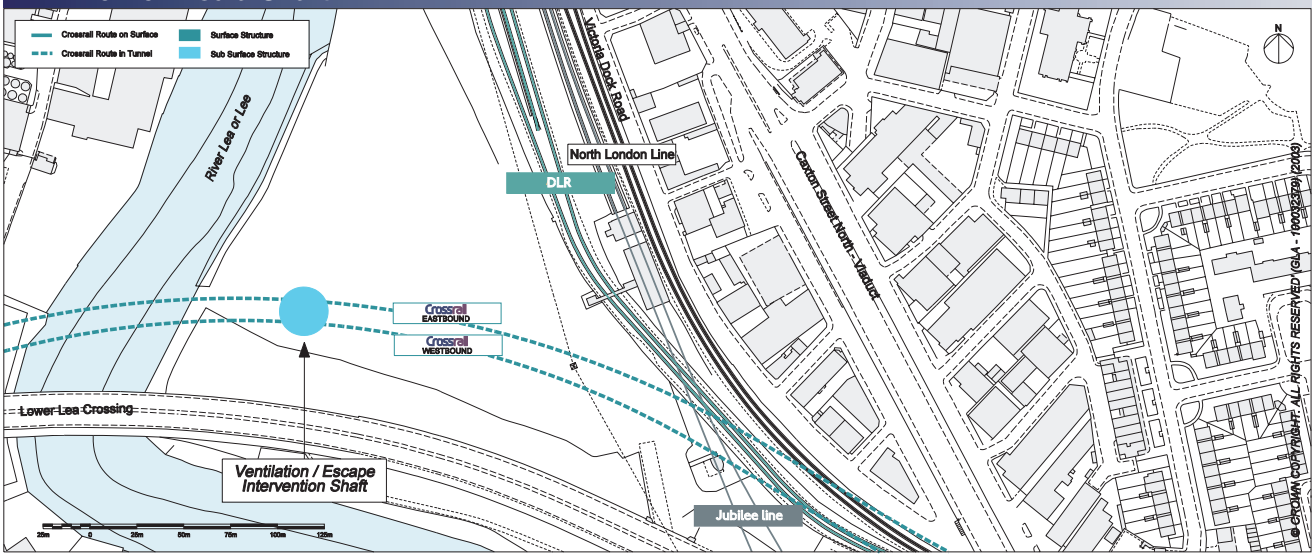
A shaft will be developed at Limmo Peninsula to provide emergency access and ventilation to the two Crossrail tunnels running between the Isle of Dogs station and Victoria Dock Portal.

The London Borough of Newham is considering proposals for the future development of the Limmo Peninsula.

The Limmo Peninsula will be used as a worksite for up to six years to construct the shaft and launch the Tunnel Boring Machine for the tunnel drive to and from Isle of Dogs station and the Victoria Dock Portal.

Limmo Peninsula is currently being used to construct the new DLR extension to London City Airport. The DLR works include a new slip road from the eastbound carriageway of the Lower Lea Crossing which will provide permanent access to the Peninsula, the Crossrail ventilation shaft and any future development.

Limmo Peninsula Shaft



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Crossrail

Crossing the Capital, Connecting the UK

MANOR PARK

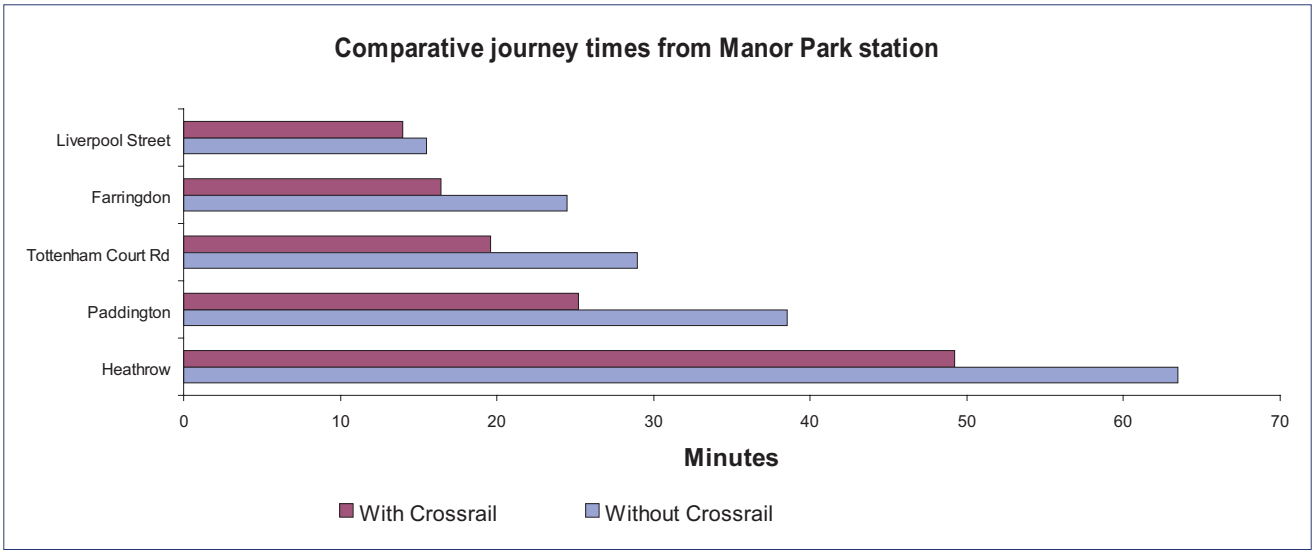
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Manor Park station by providing journey time savings and a much greater variety of convenient travel destinations.

Manor Park Station Entrance

During peak hours it is proposed that Crossrail will enable up to 12 additional train services per hour to/from Manor Park station.

Manor Park Station Platforms



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

100011-ts08-50001

Crossrail

Crossing the Capital, Connecting the UK

MANOR PARK

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

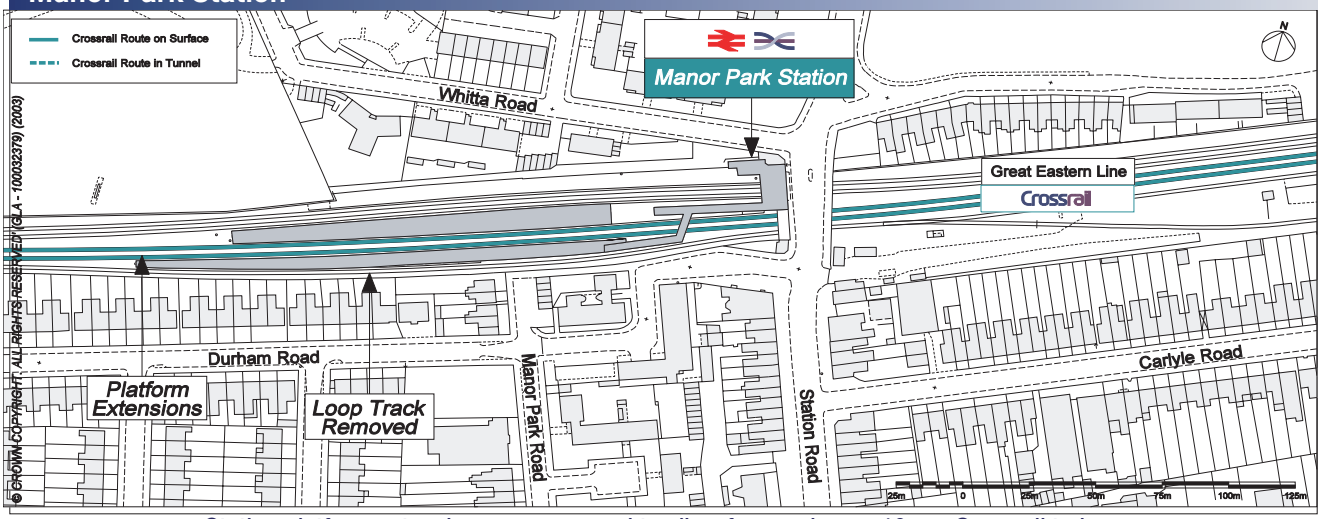
Manor Park Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Newham and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Manor Park Station



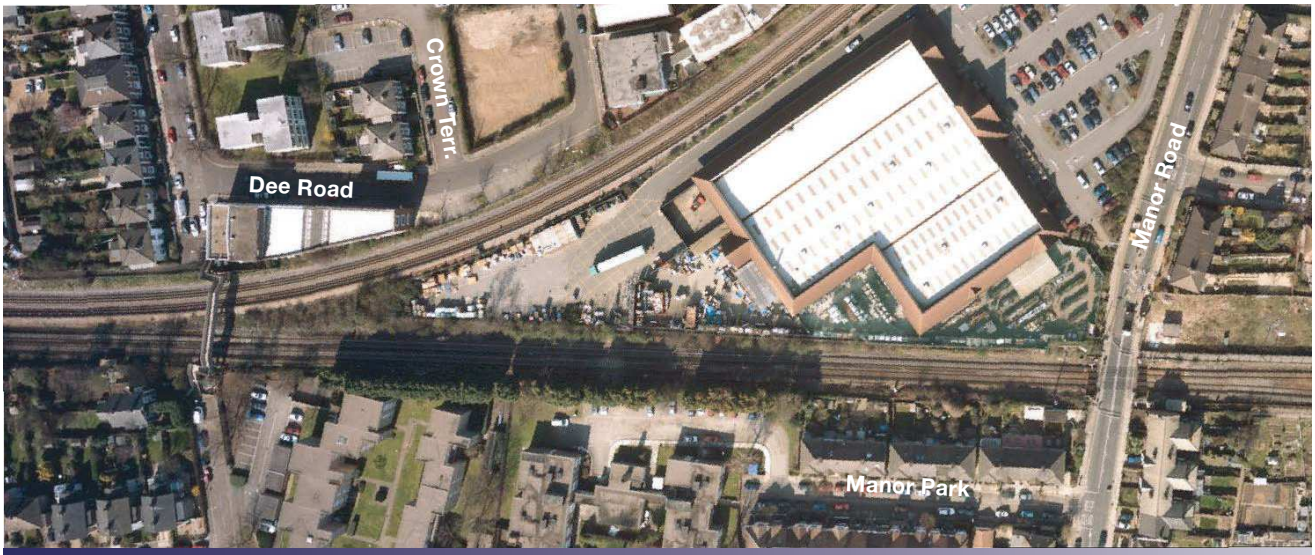
Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

Crossing the Capital, Connecting the UK

MANOR ROAD JUNCTION

LOCATION



Manor Road Junction

Crossrail proposes a service of 4 trains per hour running beyond Richmond to Kingston in addition to the current South West Trains services.
East of Richmond station these trains would need to run onto the tracks currently used by South West Trains services. In order that these trains could be accommodated, a junction would be required.

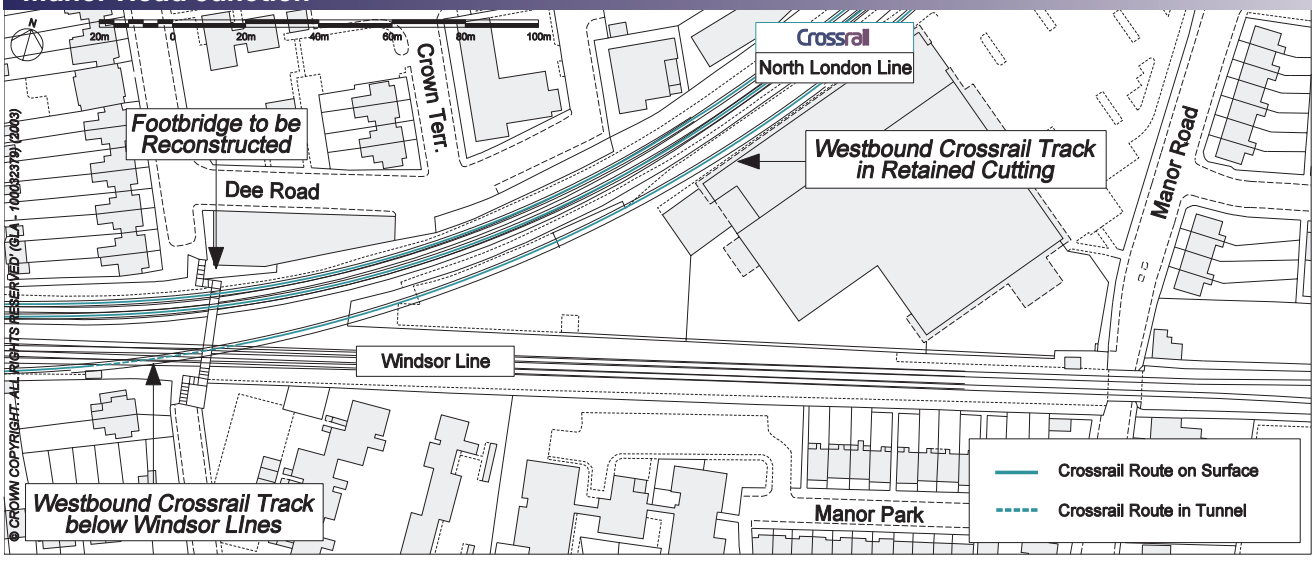
If a flat junction were to be used the number of conflicting train movements would lead to delays and unreliability of all services using the junction.

Crossrail therefore proposes to construct a single track dive-under in the vicinity of St Mary's Grove to enable Crossrail trains to pass under the South West Trains tracks.

Part of the dive-under would be built on the site of the retail premises on the west side of Manor Road, which would need to be acquired for this purpose. The existing Main Line tracks east of Richmond would be realigned closer to the North London line/District line tracks such that, to the maximum extent possible, the rest of the dive-under would be constructed on railway land.

Construction would require some land to be acquired from the gardens of properties in Townsend Terrace and Sheen Park. Access to the construction site would require some additional temporary land acquisition and possible property demolition.

Manor Road Junction



10601-w602-50000

Crossrail

Crossing the Capital, Connecting the UK

NORTH KENT LINE

PROPOSED SERVICE IMPROVEMENTS

Crossrail proposes to improve rail services on the North Kent Line with:

- New and more frequent trains
- Faster journeys to the City, West End and West London with no need to change trains
- Improved links to Heathrow Airport and Docklands
- Additional capacity and reduced crowding

Crossrail would operate as an all stations service with up to 12 trains an hour from Abbey Wood of which four trains per hour come from Ebbsfleet.

North Kent Line Service Improvements

North Kent Line Service Improvements

Crossrail would operate in addition to existing services to London terminals. The detailed service pattern will be determined in conjunction with the Strategic Rail Authority and the train operator appointed to run the new services.

Crossrail is also considering whether to operate services to Gravesend instead of Ebbsfleet. This ongoing study takes account of a range of engineering, operational and planning issues in consultation with the Strategic Rail Authority, local authorities and the community.

A number of potential train stabling locations on the North Kent Line are currently being considered including Slade Green, Northfeet, Church Path Pit and Hoo Junction. The location of train stabling facilities raises some potentially significant environmental issues. These will be examined further during future consultation.

10901-e2g00-50001

Crossrail

Crossing the Capital, Connecting the UK

NORTH WOOLWICH

PROPOSED PORTAL DEVELOPMENT

East of Silvertown, the Crossrail trains will gradually descend along the existing rail corridor to North Woolwich where it is proposed to construct a tunnel to cross under the River Thames.

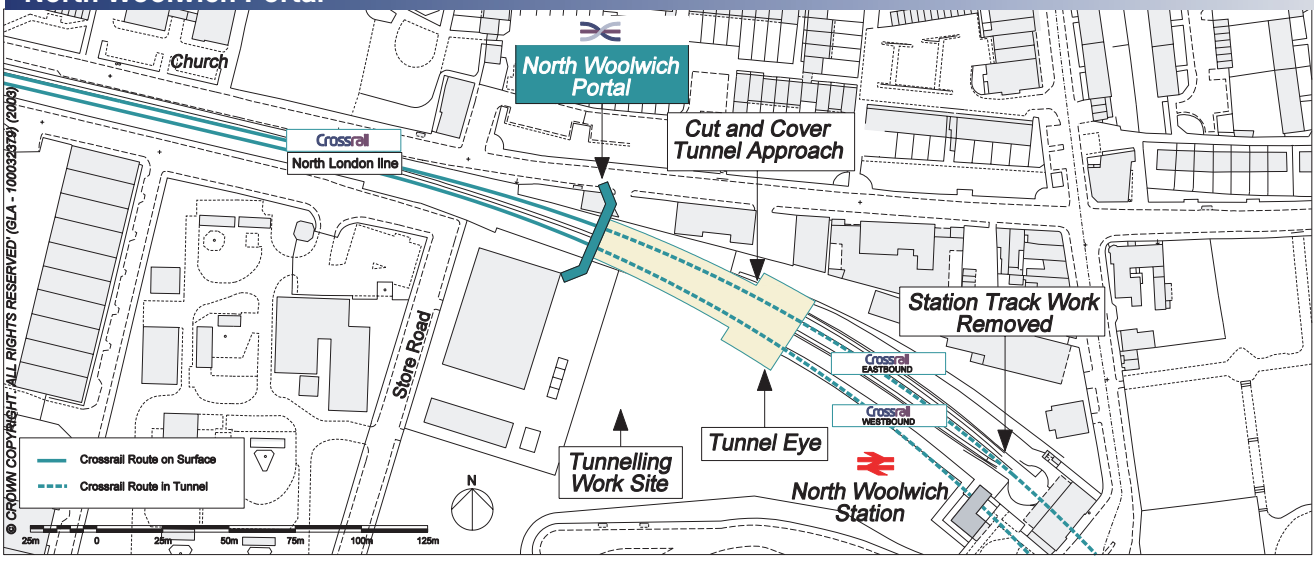
North Woolwich Portal

It is proposed that the tunnel entrance/exit (portal) will be constructed on vacant land next to North Woolwich station.

North Woolwich station will be closed permanently. Silverlink Metro Passengers will be able to use more regular services from a new DLR station being constructed at King George V (Pier Rd).

It is proposed that the Crossrail tunnels will be driven under the Thames to the portal at North Woolwich from Plumstead.

North Woolwich Portal



Crossrail

Crossing the Capital, Connecting the UK

PLUMSTEAD - ABBEY WOOD

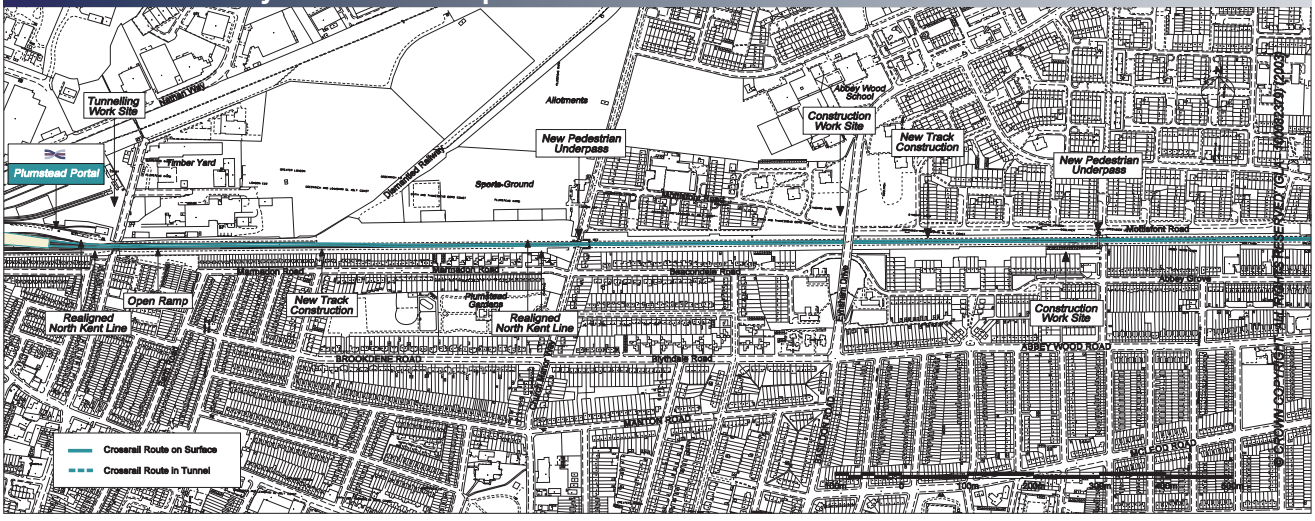
PROPOSED TRACK DEVELOPMENTS

Crossrail proposes to construct two extra tracks alongside the North Kent Line between the proposed Plumstead Portal and Abbey Wood station.

Plumstead - Abbey Wood Track Improvements

The proposed track improvements would include modifications to Bostall Manorway and Church Manorway footbridges. Most of the new track construction will be carried out within the railway boundary. However, some temporary and permanent land possession may be requried.

Plumstead - Abbey Wood Track Improvements



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Heathrow
Hayes and Harlington
Ealing Broadway
Hampton Wick
Strawberry Hill
Richmond
Gunnersbury
Kingston
Teddington
Twickenham
Kew Gardens
Turnham Green
Paddington
Tottenham Court Road
Liverpool Street
Bond Street
Farringdon
Whitechapel
Stratford
Manor Park
Seven Kings
Chadwell Heath
Gidea Park
Brentwood
Forest Gate
Ilford
Goodmayes
Romford
Harold Wood
Shenfield
Custom House
Plumstead Portal
Belvedere
Slade Green
Stone Crossing
Swanscombe
Isle of Dogs
Abbey Wood
Erith
Dartford
Greenhithe
Ebbsfleet Crossrail

Crossrail

Crossing the Capital, Connecting the UK

PLUMSTEAD

PROPOSED PORTAL DEVELOPMENT

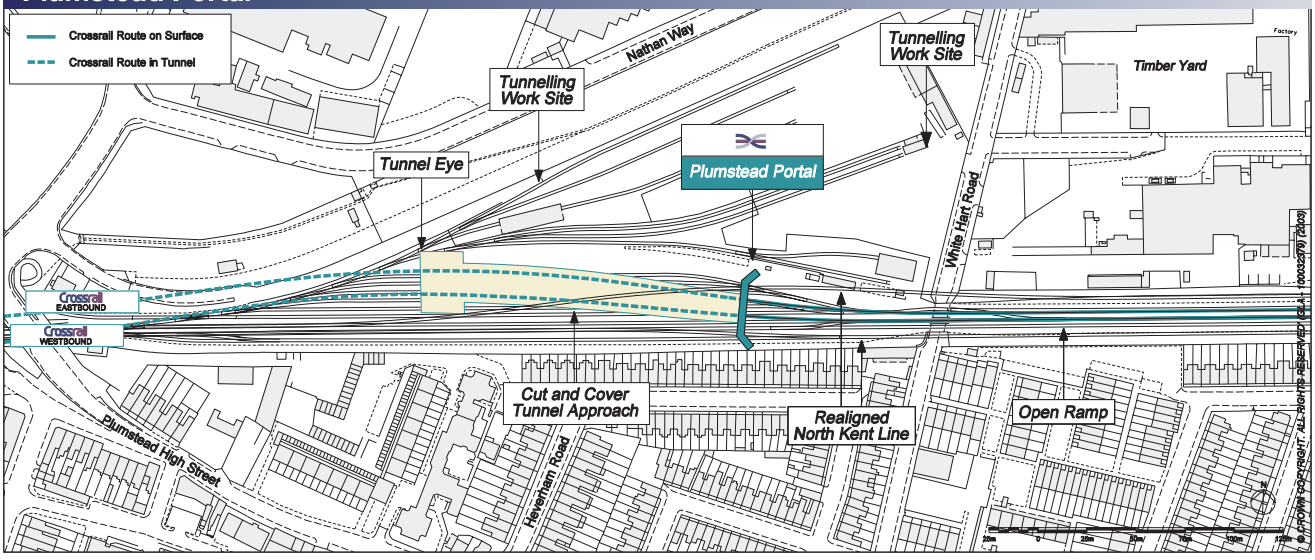
East of Woolwich, the Crossrail tunnels rise to a proposed tunnel exit/entrance (portal) on the old railway goods yards at Plumstead.

Plumstead Portal

A rail connection would be constructed between the Crossrail tunnels and the North Kent line. Existing North Kent Line services would be diverted to either side of the proposed Crossrail lines through the development of new track between Plumstead and Abbey Wood.

There would need to be some spoil removal and construction traffic associated with the portal and track works at Plumstead. Studies are continuing on the methods of spoil removal.

Plumstead Portal



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Crossrail

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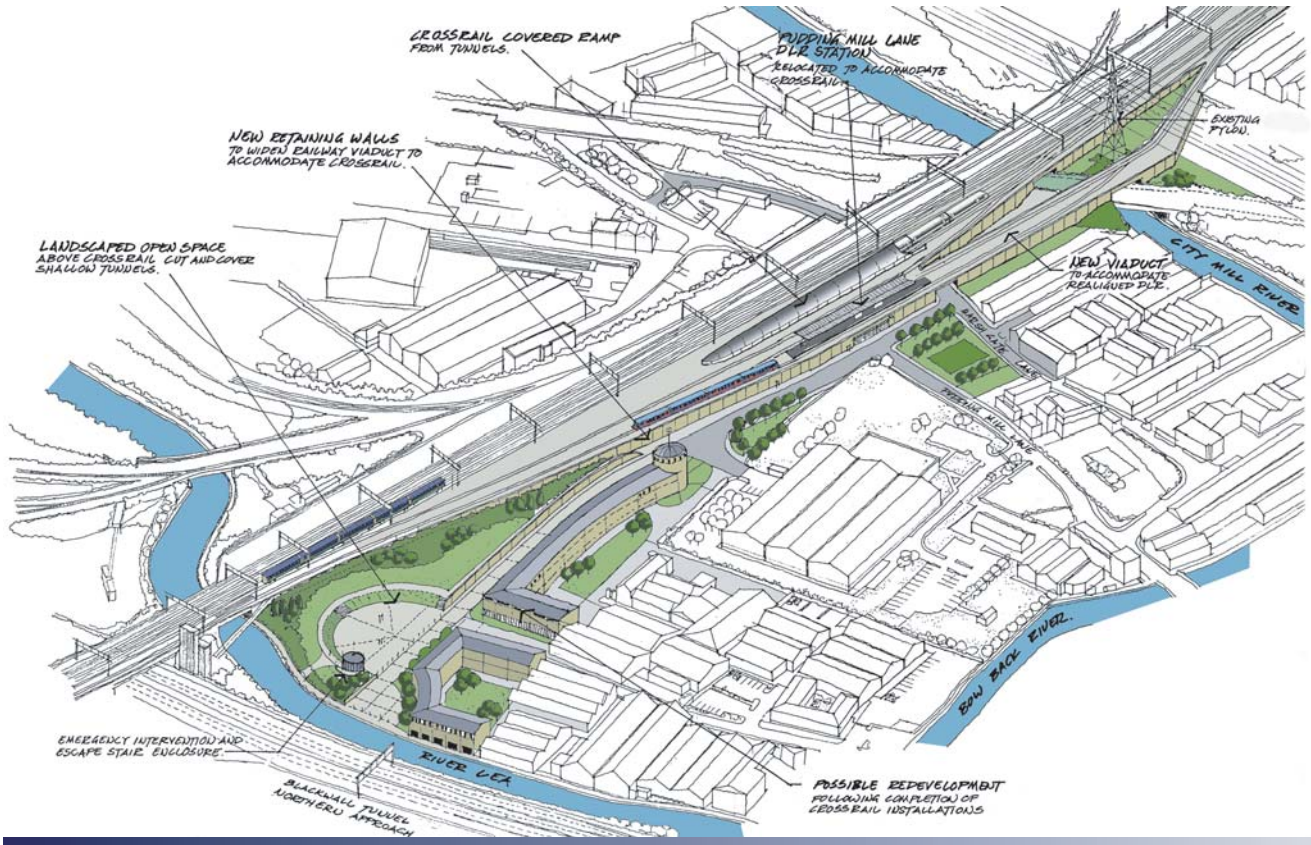
PUDDING MILL LANE

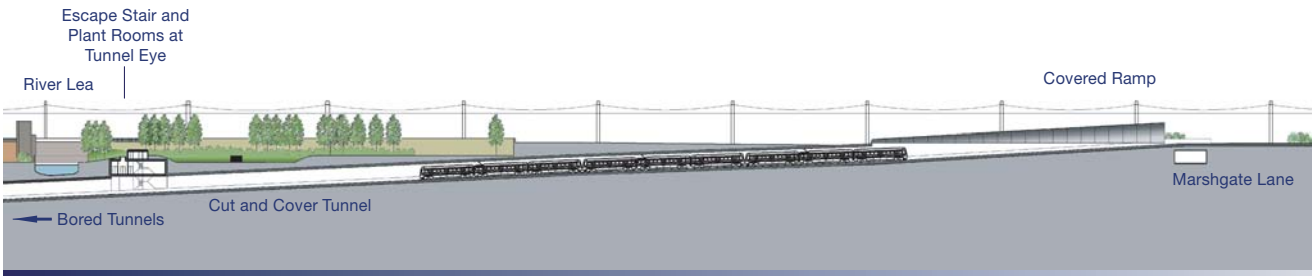
PROPOSED PORTAL DESIGN


CROSSRAIL COVERED RAMP FROM TUNNELS.
PUDDING MILL LANE DLR STATION RELOCATED TO ACCOMMODATE CROSSRAIL
NEW RETAINING WALLS TO WIDEN RAILWAY VIADUCT TO ACCOMMODATE CROSSRAIL.
EXISTING PYLON
LANDSCAPED OPEN SPACE ABOVE CROSSRAIL CUT AND COVER SHALLOW TUNNELS.
NEW VIADUCT TO ACCOMMODATE REALIGNED DLR.
CITY MILL RIVER
BOW BACK RIVER.
EMERGENCY INTERVENTION AND ESCAPE STAIR ENCLOSURE
RIVER LEA
BLACKWALL TUNNEL NORTHBOUND APPROACH
POSSIBLE REDEVELOPMENT FOLLOWING COMPLETION OF CROSSRAIL INSTALLATIONS

Proposed Portal Design

The exisiting viaduct underpass at Pudding Mill Lane would be closed and a new road connection to Marshgate Lane provided adjacent to the widened viaduct.

An emergency escape and access stair to the Crossrail tunnels would be provided close to the River Lea where the tunnels begin their ascent to the surface.



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Cross Section of Pudding Mill Lane Portal

Crossrail

Crossing the Capital, Connecting the UK

PUDDING MILL LANE

PROPOSED PORTAL DEVELOPMENT

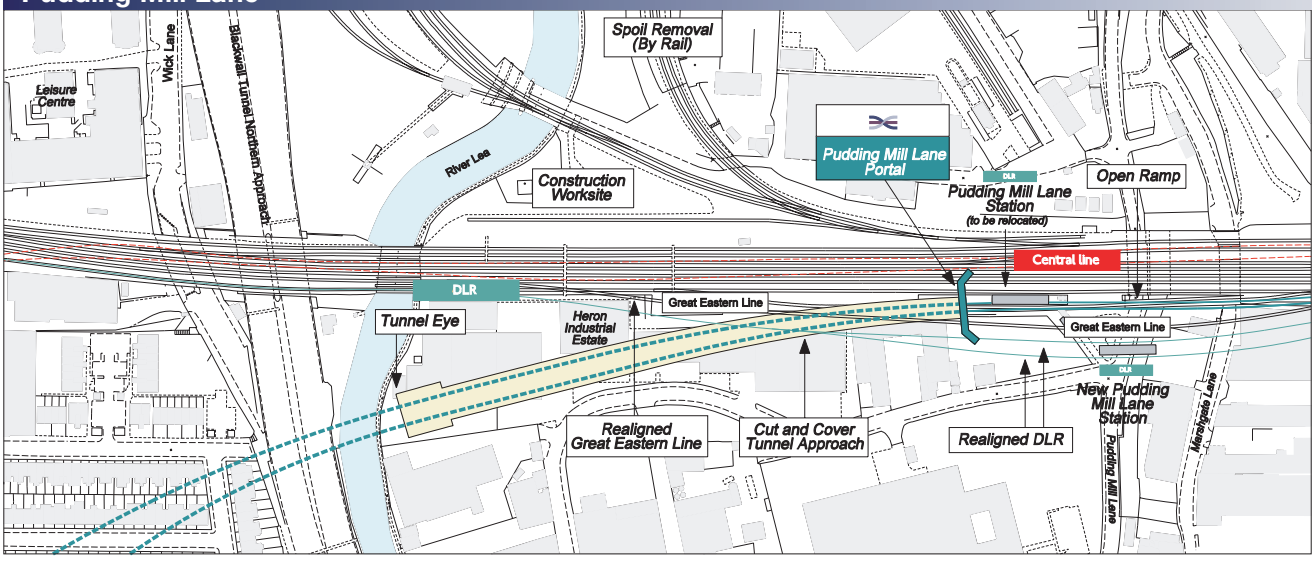
Pudding Mill Lane

It is proposed to develop a portal for the Crossrail tunnels at Pudding Mill Lane. The tunnel portal will be used as the entrance/exit for Crossrail trains to operate between the Great Eastern Line and two new tunnels through the centre of London.

In order to accommodate Crossrail, the existing railway viaduct would be widened and Docklands Light Railway realigned. The DLR station at Pudding Mill Lane would be relocated a short distance to the south of its current position.

The Tunnel Boring Machines to construct the tunnels would be launched from the site westwards towards central London. Bow Midlands Yard, an existing rail sidings and depot facility, would be used as a worksite and for the removal of construction spoil by rail freight.

Pudding Mill Lane



10601-c1r62-50001

Crossrail

Crossing the Capital, Connecting the UK

ROMFORD

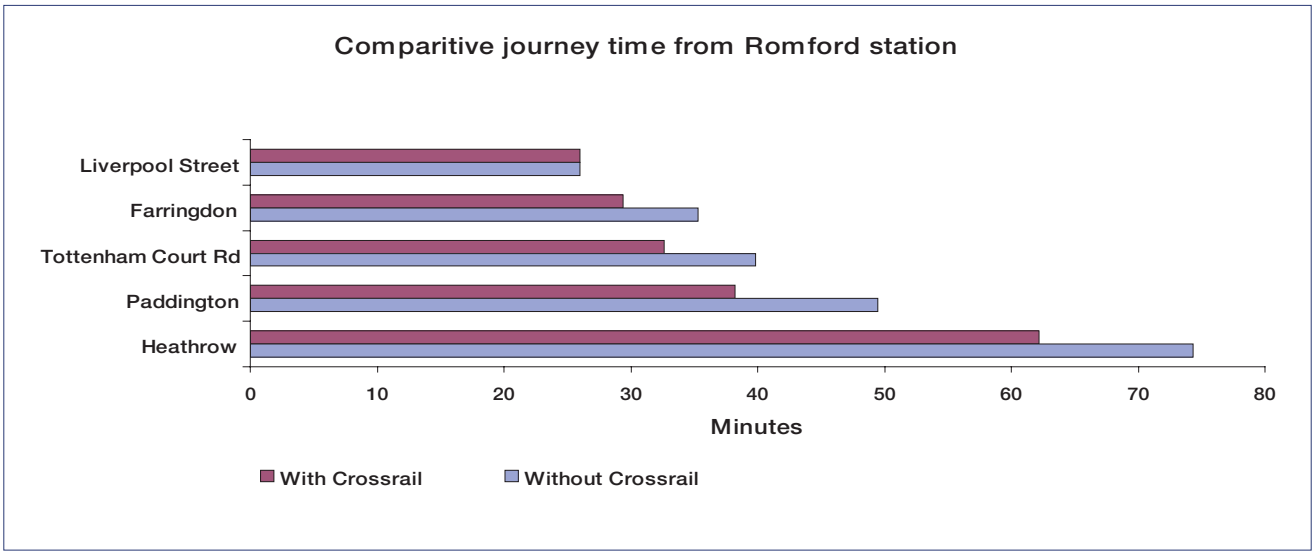
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Romford station by providing journey time savings and a much greater variety of convenient travel destinations.

Romford Station Platform

Romford Station Entrance

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Romford station (excluding long distance services).



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

ROMFORD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

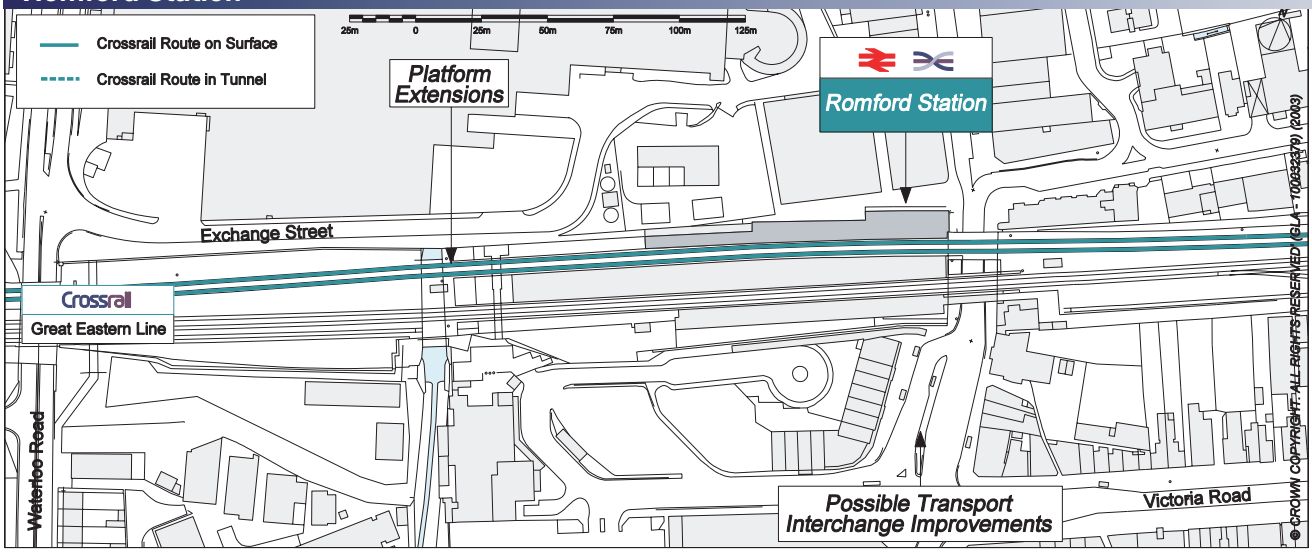
Romford Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Station design improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services including improvements to the bus interchange
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Havering and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Romford Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

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SEVEN KINGS

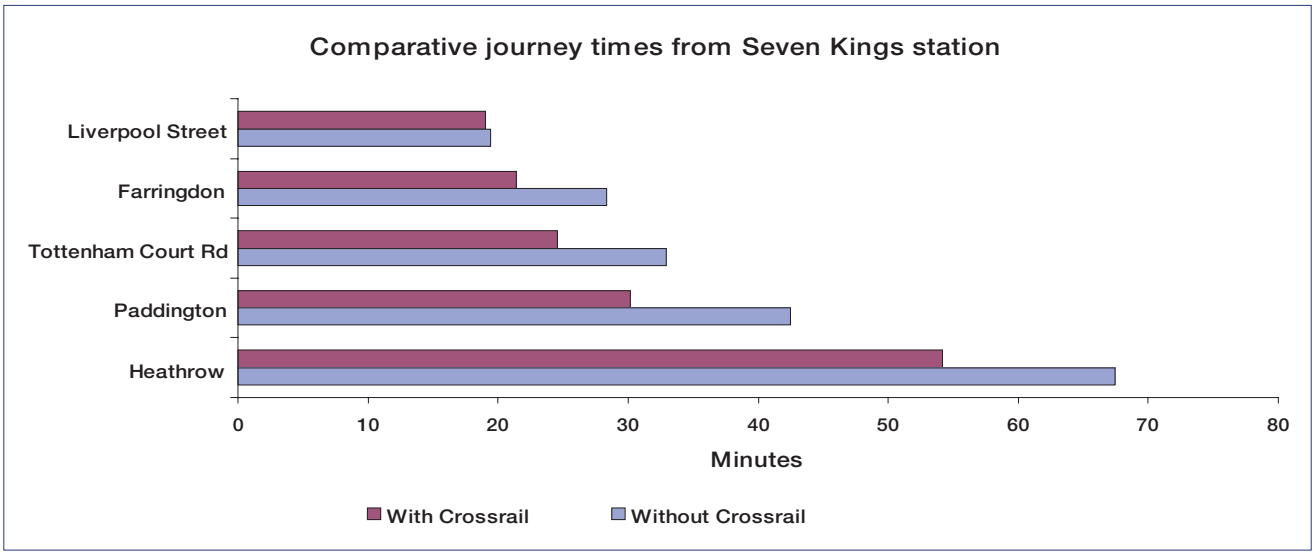
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Seven Kings station by providing journey time savings and a much greater variety of convenient travel destinations.

Seven Kings Station Entrance

During peak hours it is proposed that Crossrail will enable up to nine additional train services per hour to/from Seven Kings station.

Seven Kings Station Platform



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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SEVEN KINGS

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities will be designed to provide a high frequency, high capacity train service.

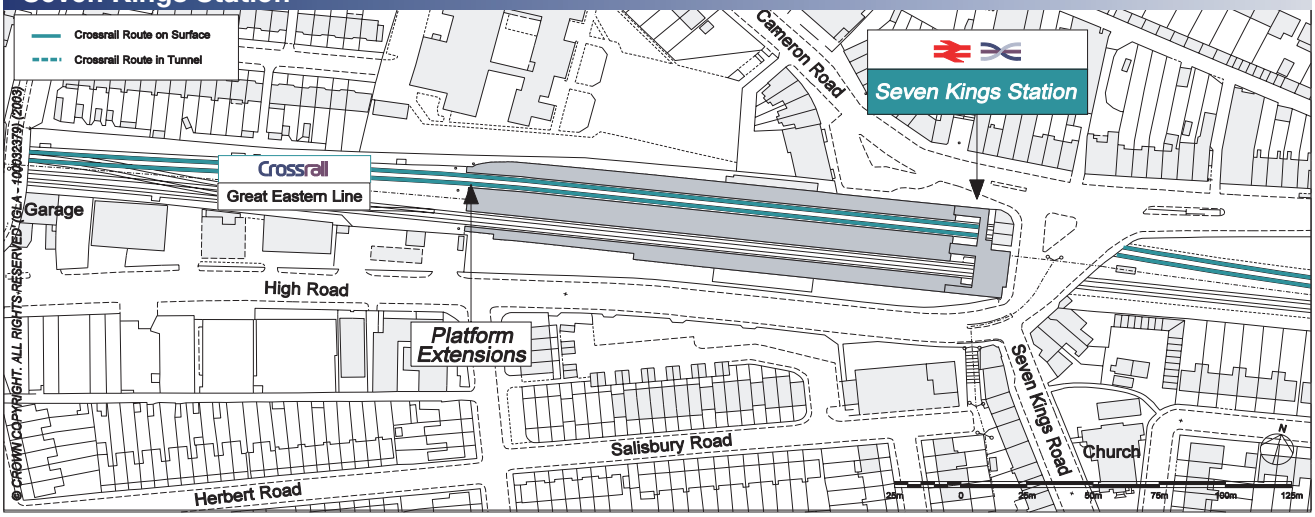
Seven Kings Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Mobility impaired person access
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Redbridge and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Seven Kings Station



Station platform extensions are proposed to allow for new longer 10-car Crossrail trains.

Crossrail

Crossing the Capital, Connecting the UK

SHENFIELD

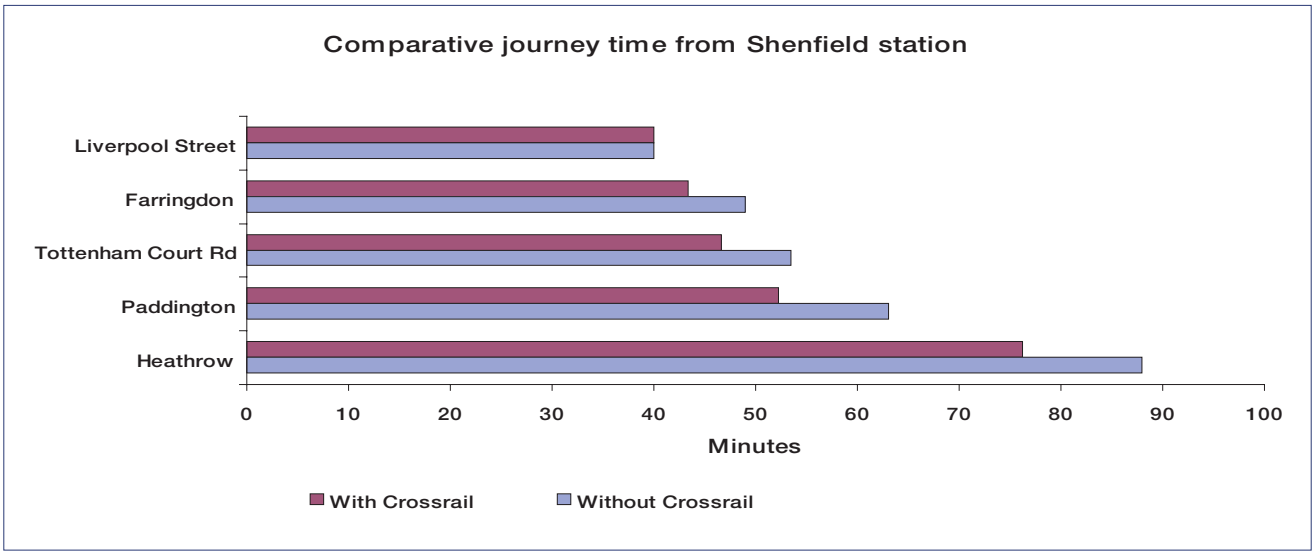
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Shenfield station by providing journey time savings and a much greater variety of convenient travel destinations.

Shenfield Station Entrance

During peak hours it is proposed that Crossrail will enable up to 4 additional train services per hour to/from Shenfield station.

Shenfield Station Platforms



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services. It is anticipated that existing fast services from Ipswich, Chelmsford and other locations which call at Shenfield will remain unchanged.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

Crossing the Capital, Connecting the UK

SHENFIELD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

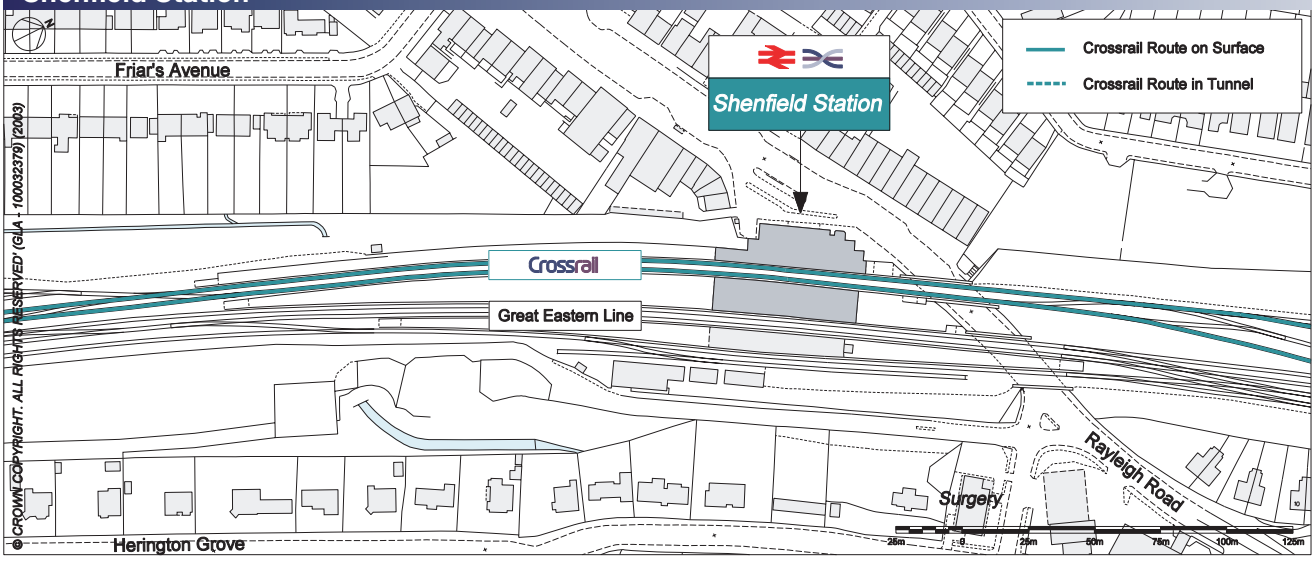
Shenfield Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Brentwood Borough Council, Essex County Council and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Shenfield Station



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Crossrail

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SLADE GREEN

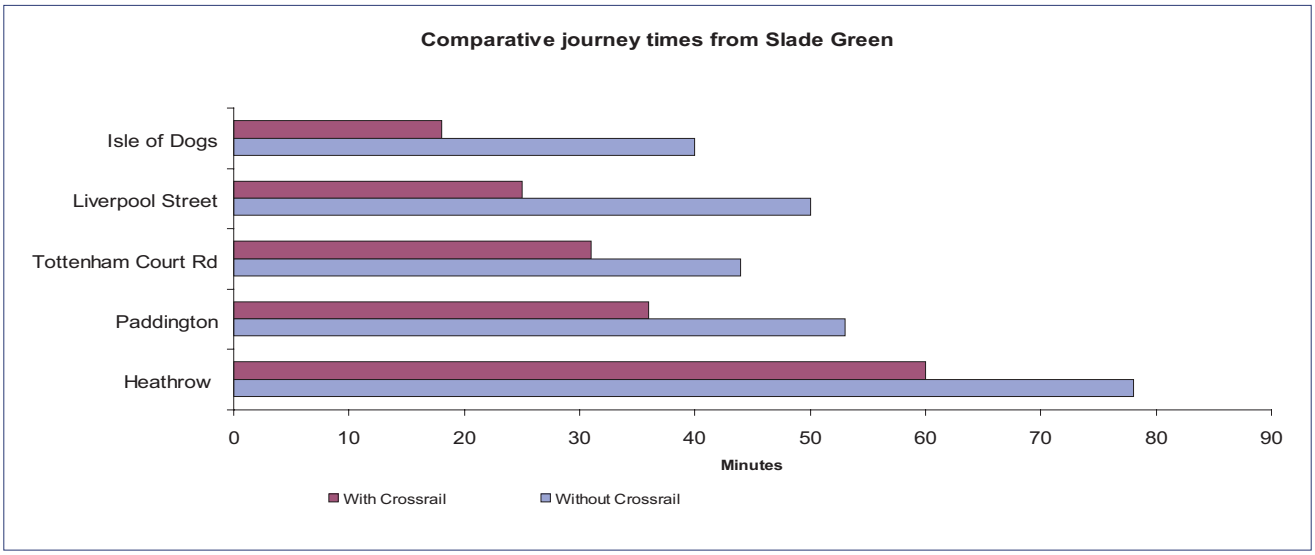
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Slade Green station by providing journey time savings and a much greater variety of convenient travel destinations.

Slade Green Station

During peak hours it is proposed that Crossrail will enable up to four additional train services per hour to/from Slade Green station.

Slade Green Station Tracks



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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SLADE GREEN

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

Slade Green Station

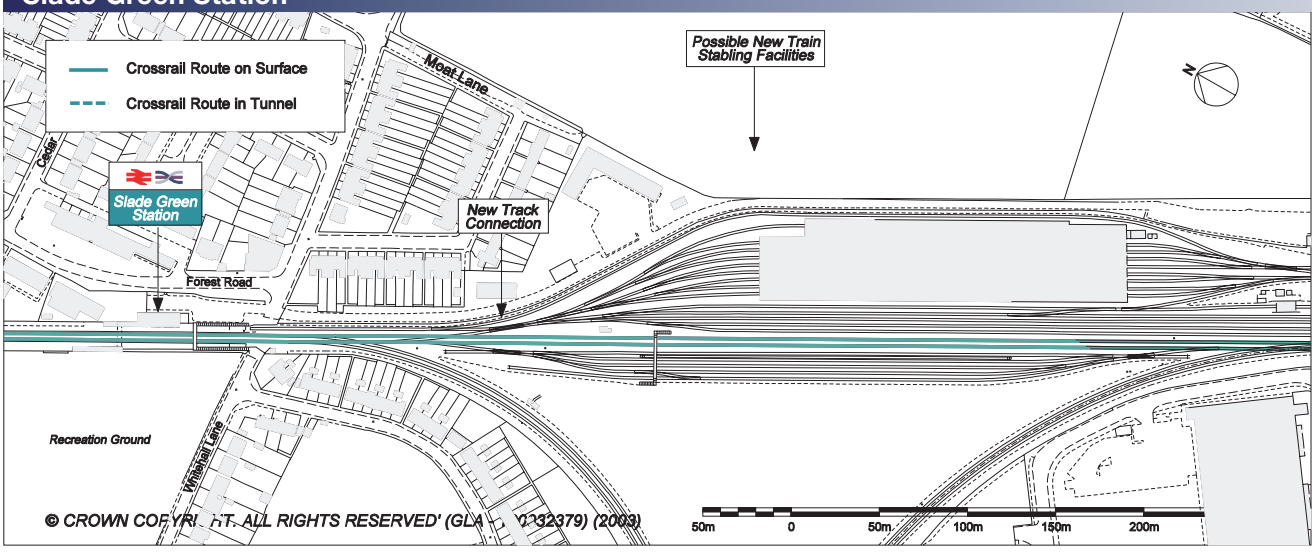
Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Parking management improvements
- Mobility impaired person access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Bexley and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Crossrail is considering an extension to the railway boundary next to the existing train depot that would enable up to 10 trains to be stabled overnight and during off-peak hours. The development of this facility potentially raises some significant planning and environmental issues that will be examined further during future consultation.

Slade Green Station



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Crossrail

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STONE CROSSING

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

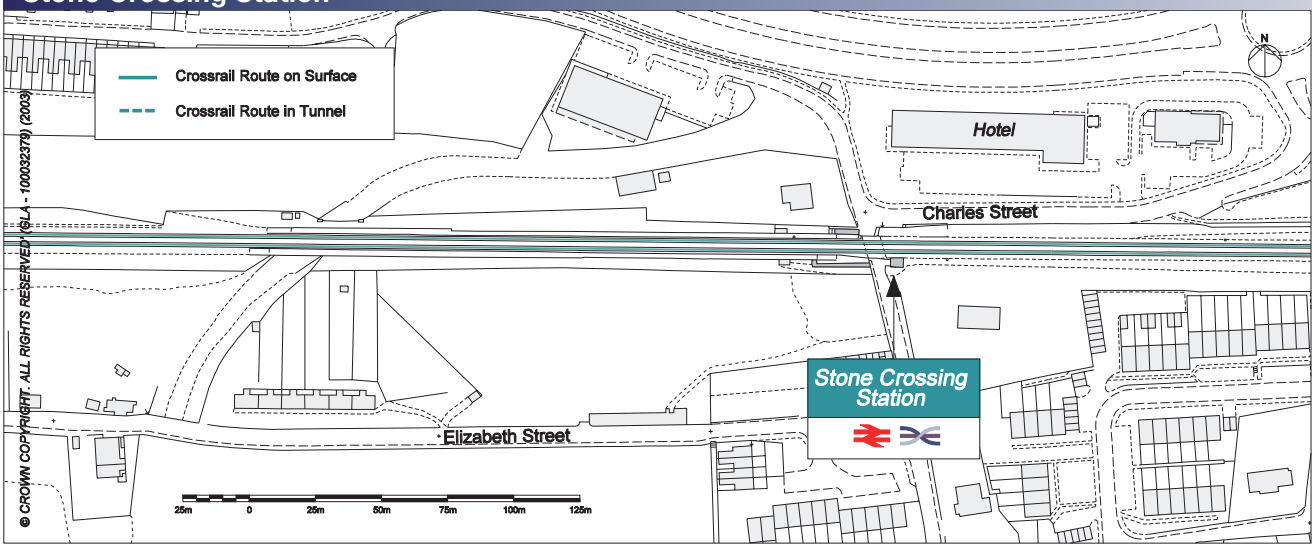
Stone Crossing Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired person access improvements
- Safety and security improvements
- Improved cycling facilities
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Dartford Borough Council, Kent County Council and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Stone Crossing Station



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Crossrail

Crossing the Capital, Connecting the UK

STRATFORD

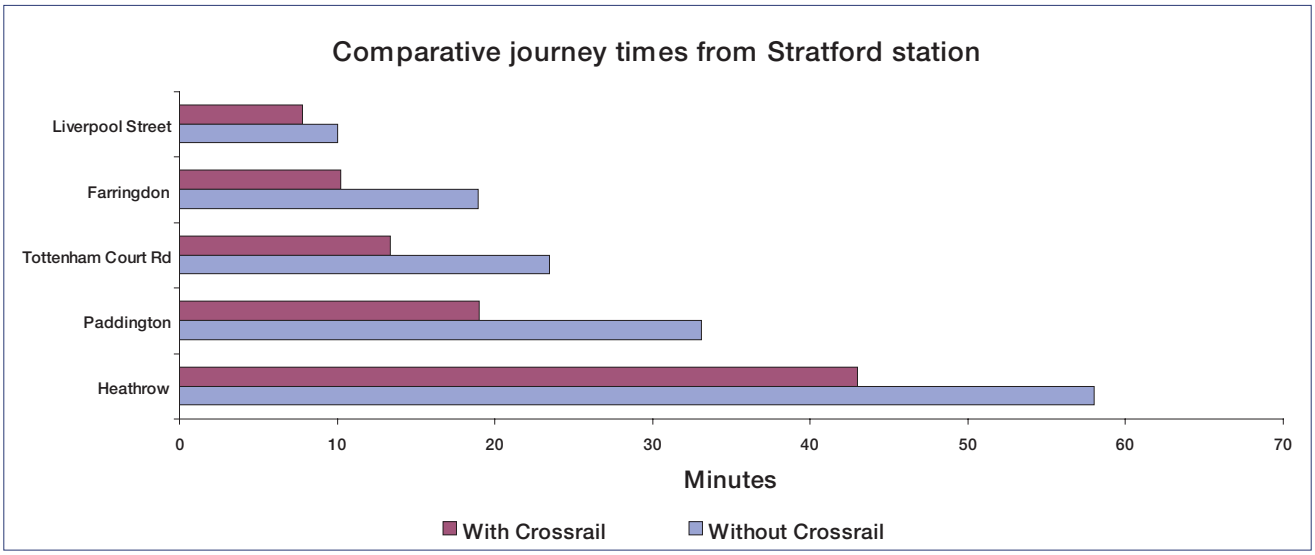
PROPOSED SERVICE IMPROVEMENTS

Crossrail would improve train services to/from Stratford station by providing journey time savings and a much greater variety of convenient travel destinations.

Stratford Station Entrance

During peak hours it is proposed that Crossrail will enable up to two additional train services per hour to/from Stratford station (excluding long distance services).

Stratford Station Platform and Tracks



The graph highlights some of the journey time savings that will be available to passengers travelling on Crossrail services.

The Crossrail service pattern is still under development. The precise service pattern will be set by the Strategic Rail Authority in consultation with train operating companies responsible for operating Crossrail services.

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Crossrail

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STRATFORD

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

Stratford Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

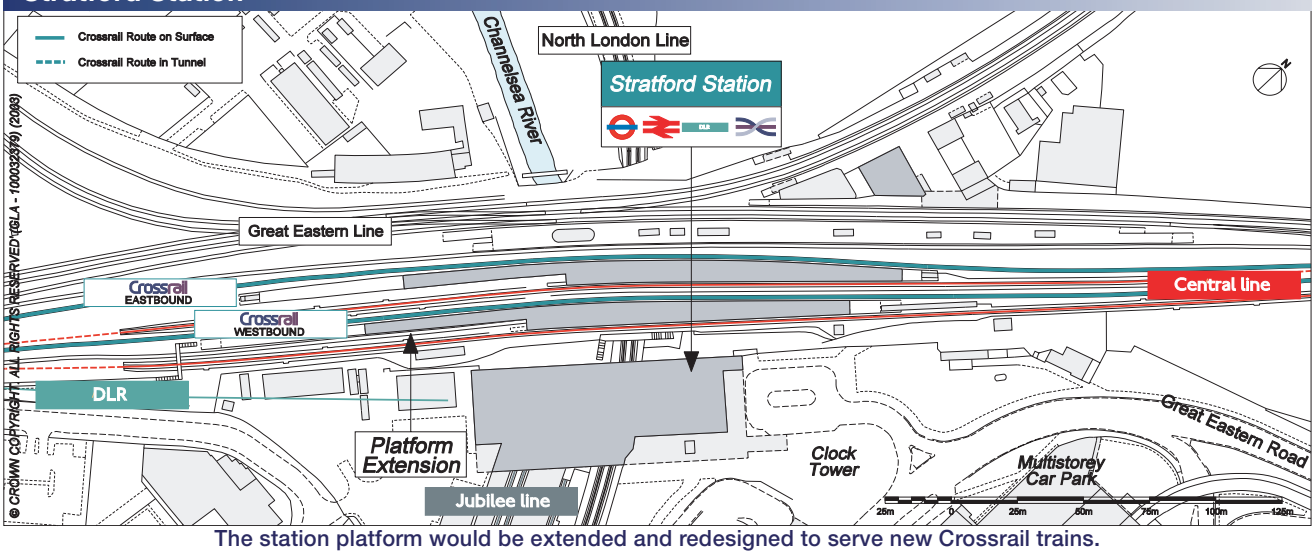
- Pedestrian access improvements
- Safety and security improvements
- Parking management improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Transport for London, London Borough of Newham and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

The numbers of people interchanging between different rail services at Stratford are expected to decrease. This will help reduce station platform congestion.

It is proposed that Crossrail services will not stop at Maryland station. It will continue to be served by train services to/from Liverpool St station.

Stratford Station



The station platform would be extended and redesigned to serve new Crossrail trains.

Crossrail

Crossing the Capital, Connecting the UK

SWANSCOMBE

PROPOSED STATION IMPROVEMENTS

All Crossrail stations and passenger facilities would be designed to provide a high frequency, high capacity train service.

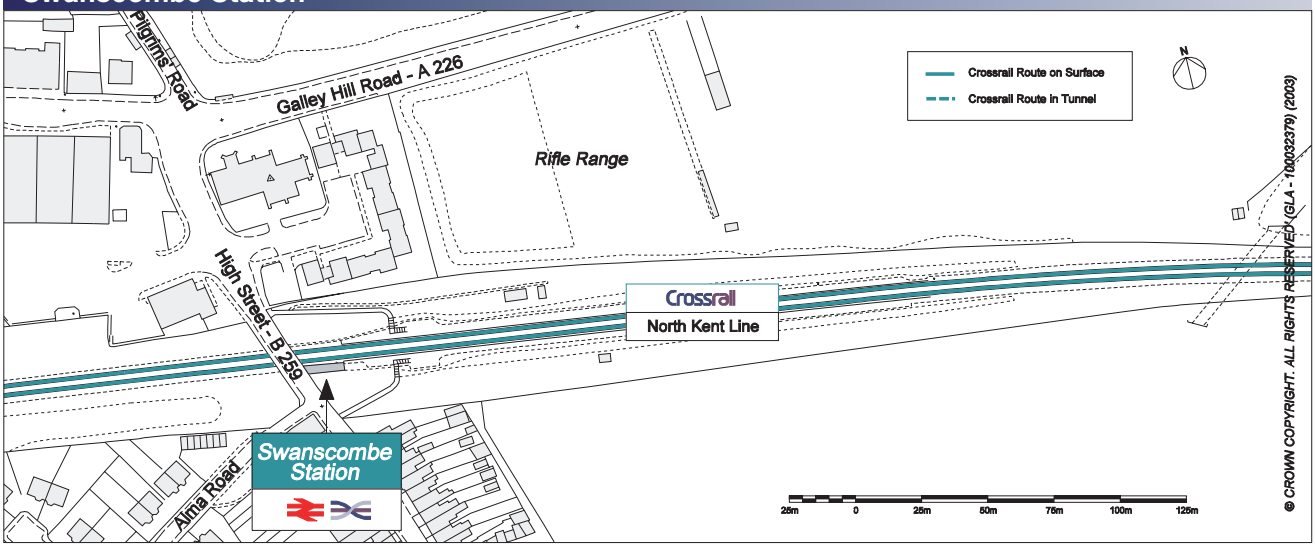
Swanscombe Station

Crossrail is expected to result in increased passenger demand to/from the station. A range of improvements are being considered to ensure that modern efficient station facilities are provided. Where feasible, this could include opportunities to improve the integration of the station with other types of transport through a wide range of measures such as:

- Mobility impaired person access improvements
- Pedestrian access improvements
- Safety and security improvements
- Improved cycling facilities
- Better links with bus services
- Passenger information improvements including visual information displays, centralised public address and Help Points.

These improvements will be considered by Crossrail in conjunction with Network Rail, the Strategic Rail Authority, Dartford Borough Council, Kent County Council, and the local community. Any specific transport issues identified will be assessed as part of the environmental impact assessment.

Swanscombe Station



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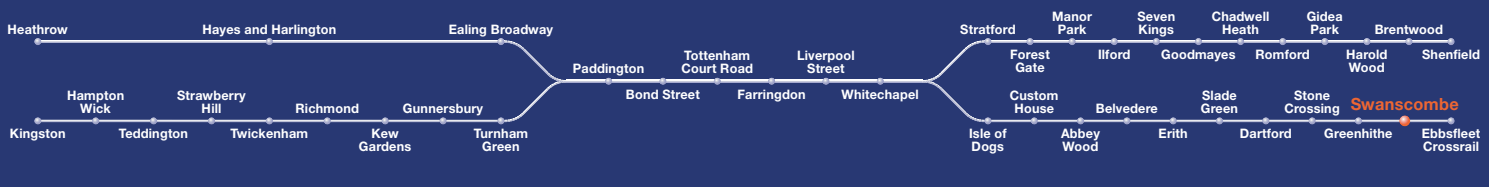

Crossrail

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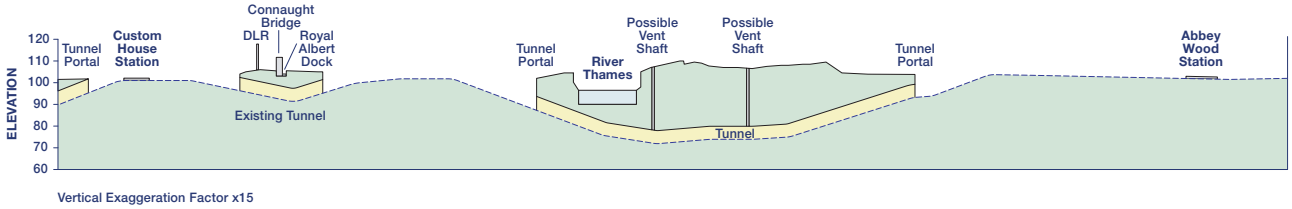
PROPOSED THAMES CROSSING

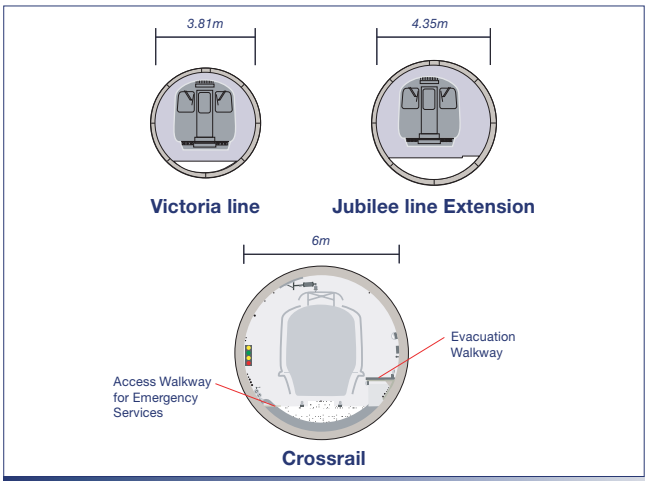
Custom House Station to Abbey Wood Station



Proposed Long Section - Custom House Station to Abbey Wood Station

Crossrail proposes to construct a new rail connection between central London and Kent via Docklands. This would require track improvements along the North London Line and the development of new tunnels under the River Thames between North Woolwich and Plumstead. East of Plumstead, Crossrail would connect with the North Kent Line and operate services as far as Ebbsfleet.

Possible Crossrail Train



Crossrail Tunnel in Comparison to Existing London Underground Tunnels

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Crossrail

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VICTORIA DOCK PORTAL

PROPOSED PORTAL DESIGN

View from Custom House Station Looking West

The two Crossrail lines would emerge from the tunnels with a new single track North London Line running between the Crossrail approach ramps.

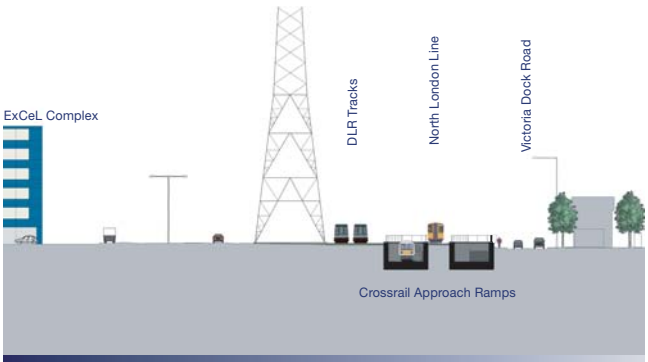
The DLR tracks would be moved to the south to allow construction of the new ramp.

In the background, on the south side of the railway the passenger assembly area and maintenance access to the underground equipment rooms are shown.

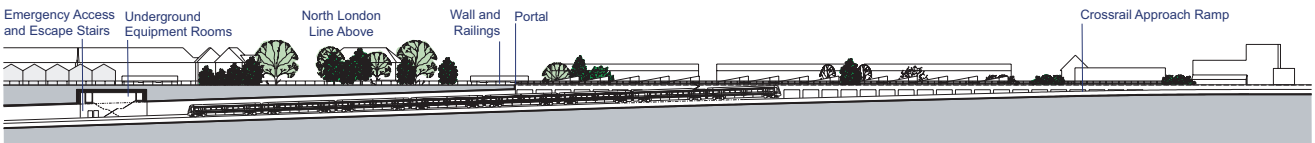
Existing View

Victoria Dock Portal would comprise the following structures:

- A 'double' open approach ramp (one ramp for each track) on which the track begins its descent into the tunnels.
- The tunnel portal.
- A cut and cover section of tunnel in which the tracks continue their descent from the portal to the tunnel eye where the bored tunnels commence.
- Stairs for emergency passenger escape and intervention with associated mechanical and electrical equipment rooms would be located underground adjacent to the tunnel eye.
- An open area on the surface for passengers in the event of a train evacuation and space for emergency and maintenance vehicles.



Section through Approach Ramps



Long Section

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Crossrail

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VICTORIA DOCK PORTAL

PROPOSED PORTAL DEVELOPMENT

Victoria Dock Portal

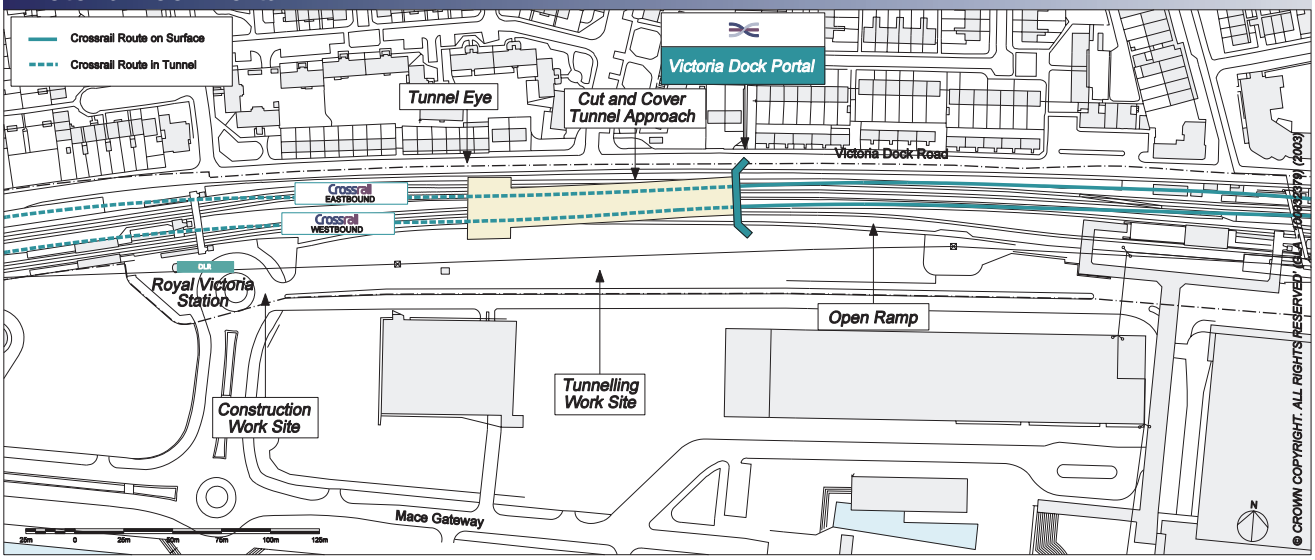
The Crossrail route through the Royal Docks would emerge from tunnel between Royal Victoria and Custom House Docklands Light Railway (DLR) stations.

Crossrail proposes to slightly alter the alignments of the DLR and North London Line to accomodate the tunnel approaches.

Construction is proposed to be carried out from a worksite in the ExCeL car park south of the railway. Construction would take around six years. Following completion, part of the site would be permanently retained as an area for emergency evacuation and access.

Victoria Dock Road Showing Proposed Wall

Victoria Dock Portal



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Crossrail

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WOOLWICH

PROPOSED SHAFT DEVELOPMENTS

After passing under the Thames from North Woolwich, the Crossrail tunnels connect with proposed tunnel shafts at Warren Lane and at Sydney Street.

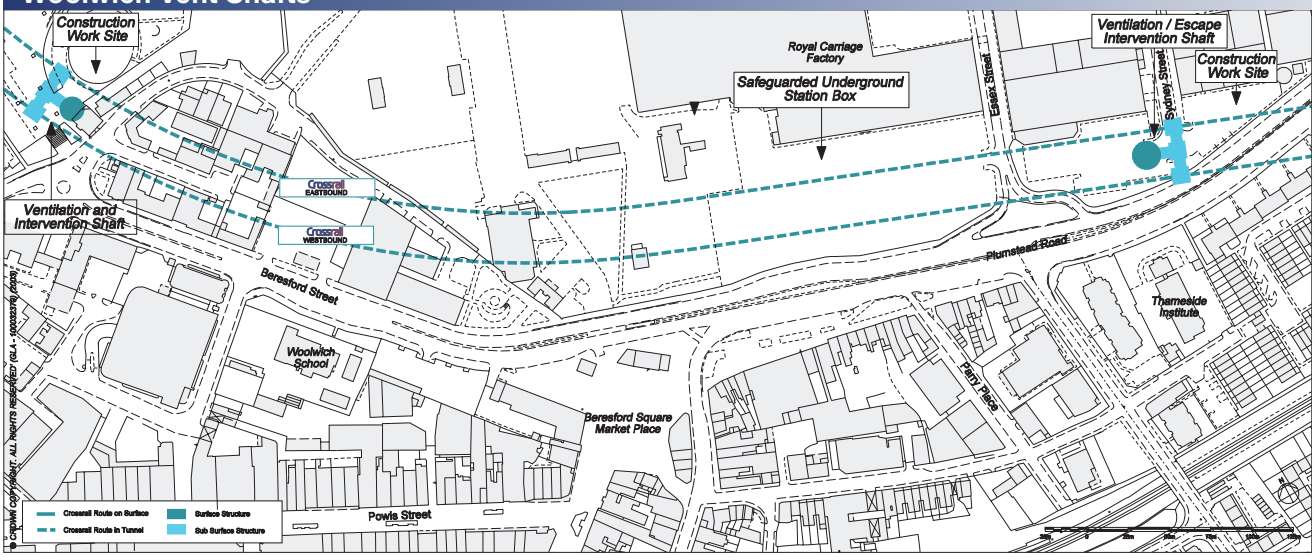
Woolwich Vent Shafts

It is proposed to develop shafts at Warren Lane and at Sydney Street to provide emergency access and ventilation to the two Crossrail tunnels running between North Woolwich and Plumstead Portals.

It is proposed that a small part of the Millennium recreation park would be required for temporary construction purposes in the development of the shaft at Warren Lane.

It is proposed to safeguard an area of land for the development of a new Crossrail station at Woolwich. A station at Woolwich does not form part of the current scheme but may form part of a future development proposal and it is important that the ability to construct a station at this location is protected.

Woolwich Vent Shafts



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